City of Hamilton

Trinity Church Arterial Corridor
Class Environmental Assessment Study Report
Phase 3 and 4

City of Hamilton

June 2007
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1. INTRODUCTION AND BACKGROUND

1.1 Introduction and Project Context

The Rymal Road Planning Area (ROPA 9) Master Plan Class Environmental Assessment documents Phases 1 and 2 (as per the Municipal Class EA process) of the recommended transportation improvements necessary to support the Rymal Road Secondary Plan area and the Special Policy Area ‘C’. The Class Environmental Assessment process allows the Master Plan approach to be used for a group of related works or undertakings. Council has approved the Master Plan approach for the group of infrastructure improvements, in accordance with Section A.2.7 of the Municipal Engineers Class Environmental Assessment process.

Completion of the Master Plan Class Environmental Assessment is part of the process to enable the City to address both the short-term and long-term infrastructure and service needs for the Rymal Road Planning Area, and for Special Policy Area ‘C’. The Master Plan was approved by the City Council in June 2006.

The City of Hamilton has also undertaken a Transportation Master Plan for the North Glanbrook Industrial Business Park. The North Glanbrook Industrial Business Park is defined by an area bounded by the north side of the Hydro Corridor on the north, Trinity Church Road on the east, Dickenson Road on the south, and beyond Nebo Road (in the vicinity of Upper Ottawa Street) on the west. The study has identified a transportation network within the North Glanbrook Industrial Business Park Secondary Plan area to support planned future development. This Transportation Master Plan has been endorsed by Council on July 12, 2006.

The ROPA 9 Master Plan addressed the Phase 1 and 2 requirements for the Trinity Church Arterial Corridor, north of Rymal Road. The North Glanbrook Industrial Business Park Master Plan addressed the Phase 1 and 2 requirements for the Trinity Church Arterial Corridor, south of Rymal Road. The Phase 3 and 4 EA study will address the entire corridor (north and south of Rymal Road).

The Trinity Church Arterial Corridor Environmental Assessment Study Area is bounded by Upper Mount Albion to the east, Stone Church Road-Paramount Drive to the north, Glover Road to the west, and Dickenson Road to the south. The study area is illustrated Exhibit 1-1.

A number of studies formed part of Phases 1 and 2 of the Master Plan Class EA. The flow chart below provides a summary and the relation of the Trinity Church Arterial Corridor study in relation to the ROPA 9 and NGIBP Master Plans.
The identification and evaluation of design alternatives and the selection of preferred design alternatives for transportation improvements for the Trinity Church Arterial Corridor are documented in this report summarizing Phases 3 and 4 of the Class EA process.

1.2 Project Location and Study Area

The project is located within the City of Hamilton, and spans three former municipalities - the former City of Stoney Creek, the former Township of Glanbrook and the former boundaries of the City of Hamilton. The project Study Area is shown in Exhibit 1-1.
Exhibit 1-1
Study Area
1.3 **Study Scope and Objectives**

1.3.1 **Findings of the ROPA 9 Master Plan Class EA**

The preferred planning alternative includes a combination of travel demand management and transit initiatives, new major infrastructure, road widenings and operational improvements.

The ROPA 9 Master Plan identified that a north-south link from the Red Hill Valley Parkway to south of Rymal Road is crucial to the broader road network within the City, and would also serve the local community. Providing adequate capacity in this corridor is critical to planning for the economic growth and well-being of the City. The former Region of Hamilton-Wentworth Official Plan recognizes this need, and has highlighted a future extension of Trinity Church Road to the Red Hill Valley Parkway.

The ROPA 9 Master Plan also identified the need for a north-south link from the Red Hill Valley Parkway to south of Rymal Road as a longer term solution to address the traffic operations issues within the Trinity Neighbourhood. It recommended that once the new road link was provided, Upper Mount Albion Road could be closed at Rymal Road.

1.3.2 **Findings of the North Glanbrook Industrial Business Park Transportation Master Plan**

In an effort to spur industrial development and make available “shovel ready lands”, the City of Hamilton undertook the North Glanbrook Industrial Business Park (NGIBP) Transportation Master Plan to identify a road network that will support the development of the lands in accordance with the current approved land uses identified in the Secondary Plan for the area. The study was necessary in order to plan for the expected increase in traffic on roadways within and adjacent to the NGIBP when development occurs.

The NGIBP Transportation Master Plan identified the need for a two lane arterial road from Rymal Road to the future Dartnall Road Extension in the vicinity of Trinity Church Road with the protection for four lanes for the arterial road in the longer term.

The Study stated that Trinity Church Road including the east-west extension to the Dartnall Road Extension is a longer term project tied to development in the park as well as growth occurring at the airport. As development in the park should have been established by the time this upgrade is needed, it is feasible and maybe more appropriate to have it constructed as development proceeds as part of a Plan of Subdivision. If driven by airport growth, it may be more appropriate for the City of Hamilton to acquire lands and construct the road in one stage.
1.3.3 Study Objectives and Approach

With the approval of the Trinity Church Road improvements north of Rymal Road as part of the Rymal Road Planning Area Master Plan and improvements south of Rymal Road as part of the North Glanbrook Industrial Business Park Transportation Master Plan, it is appropriate that the Schedule ‘C’ requirements for both projects to be undertaken in one Class EA to be consistent with the direction of the MEA Class EA document.

1.3.4 Implementation

The timing for implementation of the Trinity Church Arterial Corridor segment between Stone Church Road and Rymal Road was discussed in the Rymal Road Planning Area Master Plan, which identified that additional north-south capacity (equivalent to 2 lanes per direction) is needed in the Trinity Church Arterial Corridor by the 2011 time horizon and should be implemented as soon as possible, given design and funding constraints.

The North Glanbrook Industrial Business Park Master Plan identified a need for a longer-term extension of the Trinity Church Arterial Corridor to continue south of Rymal Road to service the Business Park and to allow flexibility for a potential future connection to the airport.

1.4 Project Team

The Trinity Church Arterial Corridor Environmental Assessment Study is being carried out by a consulting team led by iTRANS Consulting Inc., on behalf of the City of Hamilton. The Study team is outlined below:

City of Hamilton:
- Christine Lee-Morrison (City Project Manager) – Environmental Planning
- Mohan Philip – Strategic Planning
- Leanne Ryan – Traffic Engineering & Operations
- Harold Groen – Functional Planning
- Tony Sergi – Development Engineering

Consulting Team:
- Ray Bacquie (Consultant Project Manager) – iTRANS Consulting
- Suzette Shiu (Transportation Planning) – iTRANS Consulting
- Greg Perry (Road Design) – iTRANS Consulting
- Nathalie Baudais (Project Coordination) – iTRANS Consulting
- Christine Hill (Stormwater Management) – XCG
- Grant Kauffman (Natural Environment) – LGL
- Richard Unterman (Cultural Heritage) – Unterman McPhail Associates
- Robert Pihl (Archaeology) – Archaeological Services Inc.
1.5 Class Environmental Assessment Process

This Environmental Assessment (EA) is being undertaken in accordance with the guidelines of the Municipal Engineers Association Municipal Class Environmental Assessment, June 2000. The Environmental Assessment is being conducted in compliance with the guidelines for Schedule “A”, “B”, and “C” projects for the transportation infrastructure components. A brief description of each schedule follows:

- A Schedule “A” project is limited in scale, has minimal adverse environmental effects, and includes a number of municipal maintenance and operational activities. Schedule “A” projects are pre-approved and the proponent may proceed to implementation without following the full Class EA process.
- A schedule “B” project has the potential for some adverse environmental effects. Schedule “B” projects generally include improvements and minor expansions to existing facilities, and the proponent is required to undertake a screening process.
- A Schedule “C” project is one that generally involves the construction of new facilities and major expansions of existing facilities, for a total design and construction cost of greater than $1.5 million for roads. Schedule “C” projects have the potential for significant environmental impact.

The Class EA Master Plan summarized the work completed including: 1) background to the Study; 2) the problem statement 3) alternative solutions; 4) a description of the preferred alternative solutions and the rationale for the identification of the preferred alternative solutions; and 5) the public consultation process.

This Study will complete the third and fourth phases of the five-phase Class Environmental Assessment Process. Exhibit 1-2 illustrates the sequence of activities within the approved Class Environmental Assessment process leading to project implementation. The encompassing phases for this Study are described below:

- **Phase 3 (Schedule “C” projects)** – Examine alternative methods of implementing the preferred solution, based on the existing environment, public and review agency input, anticipated environmental effects, and methods of minimizing negative effects and maximizing positive effects.
- **Phase 4 (Schedule “C” projects)** – Document in an Environmental Study Report (ESR) a summary of the rationale, and the planning, design, and consultation process of the project.

Phase 5 (Schedule “A”, “B” and “C” projects), which involves detail design, preparation of contract drawings and tender documents, construction, operation, and monitoring, is not part of this Study.

The Schedule “C” project resulting from the Master Plan Studies which will be documented in this Environmental Study Report is the Trinity Church Arterial Corridor. The Class EA Master Plan for the Rymal Road Planning Area was endorsed by City Council on June 14,
2006 and for the NGIBP on July 12, 2006. A Notice of Completion will advise the public and other stakeholders of their right to request a Part II Order, and how and when such a request must be submitted. Under the Environmental Assessment Act, if it is felt after consulting with the proponent (the City of Hamilton) that serious environmental concerns remain unresolved, members of the public, interest groups, agencies, and other stakeholders may submit a written request to the Minister of the Environment to require the proponent to comply with Part II of the Environmental Assessment Act before proceeding with the proposed undertaking. Part II of the EA Act addresses Individual Environmental Assessments.

The request for a Part II Order must be copied to the proponent at the same time it is submitted to the Minister. Written requests for a Part II Order must be submitted to the Minister within the 30-calendar day review period, after the proponent has filed the Master Plan ESR and has issued the Notice of Completion of the Study. The decision to issue a Part II Order rests with the Minister of the Environment. Requests after the minimum 30-calendar day review period will not be considered by the Minister of the Environment.

### 1.6 Agency/Stakeholder Consultation

A list of agency stakeholders, including federal and provincial ministries, City of Hamilton departments, local groups, conservation authorities, utilities, and developers and their consultants was prepared at the project initiation. The opportunity for these parties to participate in the project was provided through the distribution of a Study Commencement notice. Further opportunity was also provided through announcement of two formal Public Information Centres (PICs). The following is a summary of the agencies contact list.

**Federal Agencies**
- Canadian Wildlife Services
- Canadian Environmental Assessment Agency
- Department of Fisheries and Oceans
- Environment Canada
- Parks Canada

**Provincial Agencies**
- Ontario Realty Corporation
- Ontario Provincial Police - Burlington Detachment
- Ministry of Agriculture, Food & Rural Affairs
- Ministry of Culture / Ministry of Tourism and Recreation
- Ministry of Community and Social Services
- Heritage and Libraries Branch, Ministry of Culture
- Ministry of Natural Resources
- Ministry of the Environment
- Ministry of Transportation
- Ministry of Health and Long Term Care

**First Nations**
- Six Nations
City of Hamilton Departments
- Corporate Services
- Economic Development
- Hamilton Emergency Services
- Hamilton Police Services
- Mayor's Office / Council
- Planning and Development
- Public Health and Community Services
- Public Works

Conservation Authorities
- Hamilton Conservation Authority
- Niagara Peninsula Conservation Authority
- Niagara Escarpment Commission

Local Groups / Stakeholders
- Citizens for a Sustainable Community
- Hamilton Chamber of Commerce
- Hamilton-Wentworth Catholic School Board
- Hamilton-Wentworth District School Board
- Local Architectural Conservation Advisory Committee
- Ontario Archaeological Society
- Canadian Center for Inland Waters - Remedial Action Plan (RAP)
- Resident's Group: Upper Mount Albion Road

Business Improvement Areas
- Barton Village BIA
- Concession Street BIA
- Downtown Hamilton BIA
- Dundas Downtown BIA
- International Village BIA
- King Street West BIA
- Main-West Esplanade BIA
- Ottawa Street BIA
- Stoney Creek BIA
- Waterdown BIA
- Westdale Village BIA
Class Environmental Assessment Process

Exhibit 1-2

MUNICIPAL CLASS EA PLANNING AND DESIGN PROCESS

PHASE 1
- Identify Opportunity
  - Citywide opportunity
  - Identify opportunities for consideration
  - Identify potential impacts assisted by City of Hamilton

PHASE 2
- Alternative Solutions
  - Identify alternative solutions for assessment
  - Identify potential impacts from alternative solutions

PHASE 3
- Alternative Design
  - Identify potential impacts from the most preferable solution
  - Identify potential impacts from the second most preferable solution

PHASE 4
- Environmental Study Report
  - Prepare final report to include
    - Site description
    - Description of project
    - Environmental and traffic impact

PHASE 5
- Implementation
  - Final draft report

NOTE: This flow chart is to be read in conjunction with Part A of the Municipal Class EA.
Utilities
- Bell Canada
- Cogeco Cable Inc.
- Enbridge Pipelines Inc.
- Hydro One
- Hamilton Hydro Incorporated
- Hamilton Community Energy
- Hamilton Utilities Corporation
- Fibrewired Network - Hamilton
- Source Cable Limited
- Ontario Power Generation
- Union Gas Limited
- Trans Northern Pipeline
- TransCanada Pipelines Limited
- Mountain Cablevision
- Allstream (formerly ATT & Unitel)
- Canadian National Railway
- Canadian Pacific Railway
- Imperial Oil Products & Chemical Division
- Sun Canadian Pipeline

Developers and their Consultants
- SmartCentres
- Counterpoint Engineering
- Multi-Area Developments Inc.
- A.J. Clarke and Associates Ltd.
- LEA Consulting Ltd.
- Loblaw Properties Limited
- Delcan Corporation
- J. Beume Real Estate Ltd.
- Mr. Joseph Maziarz
- Mr. Jack Pelech
- Mr. Nimigan
- Mr. Lombardi
- Mr. Dicienzio
- Silvestri Investments
- BA Consulting Group Ltd.
- Arbra Developments Inc.
- Demik Brothers Ltd.
- Paletta International Corporation
- McNally International Inc.
- Ontario Realty Corporation

Correspondences with agencies are provided in **Appendix A.1**.

### 1.7 Summary of Public Consultation Process

A comprehensive public consultation program was conducted for the Study, with the following components:

- **Mailing Lists** – A number of mailing lists were established for the Master Plan Study and were maintained for the Phase 3 and 4 Class Environmental Assessment Study. These included an agency mailing list as mentioned above and a mailing list which consisted of all members of the public within and adjacent to the Study Area, in addition to others who wrote, telephoned, emailed, or filled in comment sheets during the Study. People on the mailing list were sent letters prior to each of the public meetings. Opportunities for public input were provided throughout the process, including public meetings, telephone inquiries, letters, email and faxes.

- **Stakeholder and Technical Committee Meetings** – A Stakeholder and Technical Committee was established as part of the Master Plan Study and was maintained for the Phase 3 and 4 Class Environmental Assessment Study. One meeting was held with this group during the Phase 3 and 4 Study. The meeting was held prior to the second Phase 3 and 4 Public Information Centre (PIC). The stakeholders consisted of representatives of
local groups and businesses, and developers. City of Hamilton staff and consultants comprised the technical representatives.

- **Developers and their Consultants** – A list of developers and their consultants was prepared at the project initiation. The opportunity for these parties to participate in the project was provided through the distribution of a Study Commencement notice. One meeting was held prior to the first Phase 3 and 4 Public Information Centre (PIC) and a mail out update was sent prior to filing the Environmental Study Report.

- **Public Information Centres (PICs)** – Two formal meetings were held during the Study. They consisted of a public open house with display panels. Attendees were asked to sign-in when they entered the public open house. A handout consisting of key display panels was made available. Comment forms were available to provide the public another opportunity for input to the Study. Members of the project team were on hand to respond to questions and concerns. Issues raised by the public during and after each meeting were recorded by the consultant team and subsequently addressed.

- **Newspaper advertisements** – At least one and a half weeks prior to each public meeting, a newspaper advertisement was placed in two separate editions of the *Hamilton Spectator* and in one edition of the *At Your Service, Mountain News, Stoney Creek News*, and *Glanbrook Gazette* to announce the date, time, and location of the meetings. The newspaper advertisements invited the public to attend the meetings and to provide input. The advertisements provided information on contact names, telephone numbers, and addresses.

- **Additional notification** – At least one and a half weeks prior to each public meeting, a notice of the public meeting was mailed out to area residents and businesses on the project mailing lists. Notification letters were also mailed to utility companies and external agencies.

- **Project email address** – Through the newspaper advertisements and comments sheets, the public was invited to send comments by email to both the City and consultant team project managers.

- **Project website** – As part of the Master Plan Study, a project website was launched to provide the public with an additional means to obtain information about the project. The project website was maintained during the Phase 3 and 4 Study and the website was advertised in the PIC display materials.

Further details on the public consultation process are documented in other sections of the report. A summary of the Public Meetings is provided in Appendix A.3.

Major events in the Phase 3 and 4 public consultation process are summarized as follows:
1.7.1 **ROPA 9 Master Plan Public Consultation Process**

During the Problem Statement and Planning Alternatives phases of the ROPA 9 Master Plan, the public consultation process for the Trinity Church Arterial Corridor involved the following activities:

- **First Stakeholder Committee Meeting** September 19, 2005
- **First Public Information Centre** October 3, 2005

**First Stakeholder Committee Meeting (SC#1)**

Representatives of the City and the consultant team met with the Stakeholder Committee once during this phase of the project. These meetings provided the SC members an opportunity to meet the project team, gain preliminary information on the project, and discuss any issues relating to the project. At the first meeting, 10 members of the SC were present. Many items were discussed, including:

- How the EA process works and the role of the SC, City of Hamilton, and the consultant team in this process;
- SC Terms of Reference;
- Other studies being carried out in the vicinity of the Study Area which may pertain to this Study;
- Problem Statement; and
- The preliminary list of evaluation criteria. The following criterion was added: Adjacent Local Roads (Potential for Traffic Infiltration)
First Public Information Centre (PIC#1)

The first Public Information Centre (PIC#1) was held on Tuesday, October 3rd, 2005 from 6 p.m. to 9 p.m., at the Salvation Army Church Gym, 300 Winterberry Drive (at Paramount Drive), in the City of Hamilton. The purpose of PIC#1 was to provide information about the Study to the public and at the same time obtain public input. Twenty-four panels were displayed. The information panels included the following:

- Welcome and Study Area
- Description of the Study background, Study goal and scope
- Chart of the EA process and class EA requirements
- Description of the public consultation plan
- Summary of the needs and opportunities for the Study for transportation, water, and wastewater
- Problem statement for transportation, water, and wastewater
- Existing official plan policies and other applicable policies
- Description of existing conditions
- Description of 7 transportation alternative solutions
- Description of 5 water alternative solutions
- Description of 3 wastewater alternative solutions
- Description of alternative solutions assessment criteria
- Evaluation tables of the transportation, water, and wastewater planning alternatives
- Identification and description of the preferred transportation, water, and wastewater planning alternatives
- Future actions
- Contact information

As with all of the public information centres, the public was advised about the meeting through advertisements in the local paper. Advertisements were placed in the Hamilton Spectator on Friday September 16, 2005 and Friday September 23, 2005, and in the Brabant papers (Mountain News, Glanbrook Gazette and Stoney Creek News) on Friday September 16, 2005. Notification letters were also mailed out to property owners within the Study Area, to other individuals who had responded with an interest in the Study since its commencement, to conservation authorities, Federal and Provincial agencies, and utility companies.

The format was an informal drop-in centre from 6:00 to 7:00 PM to meet the project team and to view the display panels and drawings. There was a presentation at 7:00 PM, followed by a question and answer period. The PIC continued until 9:00 PM, which provided participants the opportunity to further discuss the project with the Study team. Attendees were asked to sign-in and were invited to fill-in comment forms at their convenience within a 3-week time frame.
Approximately 122 members of the public attended the PIC. Representatives from the City of Hamilton, iTRANS, and XCG attended the PIC to discuss the details of the project and answer questions of the public.

Key public comments provided on the Trinity Church Arterial Corridor needs assessment were related to the following topics:

- Need for a new north south link between Rymal Road and the Red Hill Valley Parkway/Stone Church Road ramps,
- Timing for improvement,
- Closure of Upper Mount Albion Road;
- Alignment alternatives; and
- Potential impacts of a new north-south roadway on adjacent properties, suggestions for consideration of other routes.

Further details and documentation regarding the Phase 1 and 2 consultation process can be found in the ROPA 9 Master Plan, June 2006.

1.7.2 North Glenbrook Industrial Business Park Master Plan Public Consultation Process

First Public Information Centre (PIC#1)

The first of two Public Information Centres (PIC) was held on Wednesday, June 29, 2005 from 4:00pm to 8:00pm at the Trinity United Church. This PIC was attended by the following members of the project team:

- Gavin Norman, City of Hamilton
- Mike Bricks, Ecoplans Limited
- Jack Thompson, McCormick Rankin Corporation

The PIC was attended by 76 people (count from sign-in sheet). The majority of the attendees reside within or nearby the study area.

The PIC was an open house with display boards presenting the network alternatives considered, the evaluation of alternatives and the recommended network. Attendees had the opportunity to address and discuss any question or concerns with the project team. Handout copies of the PIC display board and evaluation charts were available.

Comment sheets were provided for submission of comments. During the PIC 15 comment sheets were submitted. After the PIC additional comments were received and included one fax, four e-mails and four letters. In addition to written comments, five telephone requests for PIC handouts were received by the City of Hamilton. The following table summarizes the written comments received.
In addition to written comments, the following provides a general overview of attendee verbal comments during the Public Information Centre:

- Impact to residential homes along Trinity Church and concerns re: safety, increased traffic and previous Glanbrook bylaw providing a buffer strip between industrial development and Trinity Church Road should be implemented;
- Viability of the North Glanbrook Industrial Business Park;
- Displacement of agricultural land for more industrial land;
- Support for North Glanbrook Industrial Park since the Red Hill Valley Expressway will provide needed access;
- Interest in the extent of future sanitary services in study area;
- Alignment concerns specific to certain landowners; and
- Redirection of traffic away from roads servicing residential homes

Second Public Information Centre (PIC #2)

The second and final Public Information Centres (PIC) for the North Glanbrook Industrial Business Park was held on Tuesday, June 16, 2006 from 4:00pm to 8:00pm at the Trinity United Church. This PIC was attended by the following members of the project team:

- Gavin Norman, City of Hamilton
- Mike Bricks, Ecoplans Limited
- Katie Bright, Ecoplans Limited
- Scott Roberts, McCormick Rankin Corporation

The PIC was attended by 63 people (count from sign-in sheet). The majority of the attendees reside within or nearby the study area.

The PIC was an open house with display boards presenting the comments from the first PIC, the preferred network, details of the Schedule B projects, future study areas for Schedule C projects and three Dartnall Road Extension alignment alternatives. Attendees had the opportunity to address and discuss any question or concerns with the project team. Handout copies of the PIC display boards were available. Comment sheets were provided for submission of comments.

In addition to written comments, the following provides a general overview of attendee verbal comments during the Public Information Centre:

- Interest in future zoning changes and land use plans within the North Glanbrook Industrial Business Park;
- Concern regarding the displacement of agricultural land for more industrial land;
- Concern regarding direct link between the North Glanbrook Industrial Park and the Red Hill Valley Parkway, especially along Trinity Church Road; and
- Alignment concerns specific to certain landowners.
Further details and documentation regarding the Phase 1 and 2 consultation process can be found in the ROPA 9 Master Plan, June 2006.

1.7.3 Phase 3 and 4 Consultation

The public consultation process and public reaction during the Design Phase for the Trinity Church Arterial Corridor are summarized in Section 4.2 of this report. Additional details on the public consultation process are contained in Appendix A.
2. **EXISTING STUDY AREA CONDITIONS**

This section describes the features of the existing transportation infrastructure in the study area. For information on the existing socio-economic environment, natural environment, surface runoff and utilities, please refer to the Master Plan document.

2.1 **Existing Transportation Facilities**

2.1.1 **Road Classification**

The existing road network and classifications based on the current City’s Official Plan designations are illustrated in **Exhibit 2-1**. The official plan definitions of the road classes and designated right-of-way are noted in **Table 2-1**. For specifics on any road in the City’s road network, refer to the appropriate Official Plan for right-of-way designations. The appropriate volume for the different classes is based on the 1999 *Geometric Design Guide for Canadian Roads* by the Transportation Association of Canada (TAC) and represents the 24-hour two-direction volume thresholds.

**Table 2-1: Official Plan Definitions of the Road Classes**

<table>
<thead>
<tr>
<th>Current Designation</th>
<th>Definition</th>
<th>Designated Right-of-Way</th>
<th>Volume for Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterial</td>
<td>Strategic links in the road network, the main functions of which are to carry relatively high volumes of long distance traffic within, between or through the City and surrounding Area Municipalities and/or to provide access past major geographic barriers and to inter-regional highways.</td>
<td>36 m</td>
<td>&gt; 5,000 &lt; 30,000</td>
</tr>
<tr>
<td>Collector</td>
<td>Function as connecting road links between Arterial and Local Roads. They generally carry lower traffic volumes than Arterial Roads and may provide direct access to abutting properties.</td>
<td>26 m</td>
<td>&lt;8,000</td>
</tr>
<tr>
<td>Local</td>
<td>Provide direct access to abutting properties and carry traffic predominantly of local nature.</td>
<td>20 m</td>
<td>&lt;1,500</td>
</tr>
</tbody>
</table>

For roads in the City of Hamilton, road right-of-way designations can reach up to 60 m and volumes may exceed 30,000 per day.
Legend
- Arterial or Inter-Regional Highway
- Collector Road
- Schematic of Karst Core Boundary
- Posted Speed Limit
- School/Church
- 1500 24-hour Traffic Volumes (2-way)

Exhibit 2-1
Existing Road Network and Classifications
City of Hamilton

June 2007
2.1.2 Road Network and Characteristics

The study area roads are described below.

**Rymal Road** – Rymal Road is an east-west arterial road, with a two-lane, paved rural cross-section and a posted speed limit of 70 km/h. Rymal Road had horizontal curves between Pritchard Road and Trinity Church Road. It intersects with a number of north-south collector and arterial roads. Rymal Road will also provide new collector road connections to the Rymal Road Planning area. Rymal Road has several residential and commercial accesses. No sidewalks are currently provided along the roadway.

Parallel east-west roadways north of Rymal Road include Mud Street West and Highland Road East. Golf Club Road parallels Rymal Road to the south of the Study Area.

Exhibit 2-2: Rymal Road Westbound (approaching Fletcher Road)
Exhibit 2-3: Rymal Road Westbound (approaching Swayze Road)

**Trinity Church Road** – Trinity Church Road is a two-lane north-south arterial south of Rymal Road with a rural cross-section, no shoulders and a posted speed limit of 50 km/h north of the Hydro Corridor and a posted speed limit of 60 km/h south of the Hydro Corridor. Trinity Church Road currently terminates at Rymal Road. The vertical geometry of Trinity Church Road is rolling. A future interchange for the Red Hill Valley Parkway is currently aligned with an extension of Trinity Church Road. Trinity Church Road provides north-south access for the lands in Glanbrook to the south of ROPA 9. There are residential driveways along Trinity Church Road. No sidewalks are provided on either side of the roadway.

Exhibit 2-4: Trinity Church Road Northbound (approaching Rymal Road)

**Upper Mount Albion Road** – Upper Mount Albion Road is a local road which extends from Mud Street to Rymal Road, and is discontinuous at the Lincoln Alexander Parkway. The road provides direct access to residential properties but provides an arterial road function in the study area road network. It is anticipated that Upper Mount Albion Road will serve more of a local road function (as designated) in the future. Upper Mount Albion Road has a posted speed limit of 60 km/h. The road has a rural cross-section with an average pavement width of approximately 7.5 m and no sidewalks. Upper Mount Albion Road has a rolling terrain. There are several residential accesses and frontages along Upper Mount Albion Road.
Exhibit 2-5: Upper Mount Albion Road Northbound (north of Rymal Road)

**Highland Road** – Highland Road is a collector road. It has an urban cross-section east of Winterberry Drive and a rural cross-section with an average pavement width of approximately 6.5 m west of Winterberry Drive. There are residential accesses and frontage along Highland Road, which becomes more dense east of Winterberry Drive. A high school (Saltfleet Secondary School) is located on the northwest corner of the intersection with Highbury Drive. A sidewalk is provided on the north side of Highland Road, east of Winterberry Drive. The posted speed limit on Highland Road is 50 km/h, reducing to 40 km/h near Highbury Drive.

Exhibit 2-6: Highland Road Eastbound (at Upper Mount Albion Road)

**Stone Church Road** – Stone Church Road is an east-west arterial which provides access to Mud Street via Paramount Drive. Stone Church Road has an urban cross-section with paved
shoulders west of Pritchard Road, a rural cross-section with paved shoulders east of Upper Mount Albion Road, and a rural cross-section with gravel shoulders between Upper Mount Albion Road and Pritchard Road. A sidewalk is provided on the south side of Stone Church Road, near Winterberry Drive. Bike lanes are provided on Stone Church Road west of Pritchard Road, and near the intersection with Winterberry Drive. No bike lanes currently exist between Pritchard Road and east of Upper Mount Albion Road.

Exhibit 2-7: Stone Church Road Westbound (east of Pritchard Road)

Exhibit 2-8: Stone Church Road Eastbound (at Winterberry Drive)
3. PREFERRED PLANNING ALTERNATIVE

The Class Environmental Assessment process requires the examination of all reasonable alternatives, including alternatives to the undertaking, referred to as planning alternatives. Through the Master Plan Study, planning alternatives that addressed the problem statement were developed and evaluated and presented to the public. The following transportation improvements were part of the preferred alternatives for the Trinity Church Arterial Corridor, in conjunction with Travel Demand Management initiatives:

- Traffic controls (signals or roundabout) at: Stone Church Road, Highland Road, future midblock collector road, Rymal Road, and the future extension of Twenty Road;
- Closure of Upper Mount Albion Road.

The ROPA 9 Master Plan (Phase 1 and 2) Study also recommended that:

- Transit service be considered along the Trinity Church Arterial Corridor with potential new transit stops at intersections with Stone Church Road, Highland Road, proposed trail head for the Red Hill Valley Open Space Replacement Strategy, and Rymal Road;
- Carpool lot be considered along the Trinity Church Arterial Corridor
- Sidewalks be considered for the Trinity Church Arterial Corridor;
- Designated truck route be considered for the Trinity Church Arterial Corridor; and
- Bicycle routes be considered for the Trinity Church Arterial Corridor.

The NGIBP Master Plan recommended the extension of Trinity Church Road from Rymal Road to the Red Hill Valley Parkway (2 lane arterial roadway with protection for 4 lanes) and the provision of an east-west connection between the south end of the NGIBP area, possibly via Dickenson Road or Airport Road, to the Trinity Church extension.
4. EVALUATION OF DESIGN ALTERNATIVES

The Class Environmental Assessment process requires the examination of alternative methods of implementing the preferred undertaking by considering design alternatives. This section of the report provides a discussion on the development and evaluation of the design alternatives for the Trinity Church Arterial Corridor.

4.1 Development and Evaluation of Design Alternatives

For the recommended planning alternative, there were a number of possible ways to implement the undertaking. Design alternatives are different ways of implementing the preferred planning alternative. The preferred planning alternatives were determined during the Master Plan Study and are summarized in Section 3 of this report. The advantages and disadvantages of each design alternative were identified and evaluated to determine the best implementation of the undertaking. This is discussed below.

4.1.1 Development of Design Alternatives

The proposed Trinity Church Arterial Corridor design alternatives include the following:

- Alternative alignments for the Trinity Church Arterial Corridor,
- Warrants and appropriateness for traffic control devices (traffic control signals or roundabouts) for the intersections with Highland Road, Midblock Collector Road, Rymal Road and the extension of Twenty Road,
- Provision of urban or rural cross-section, and
- Storage requirements for auxiliary lanes.

Additional roadway enhancements / improvements could include:

- Enhanced pedestrian environment
- Enhanced cyclist environment
- Streetscaping, where feasible

Each design alternative was developed and assessed in recognition of the following criteria:
Effect on Transportation Service
- Corridor Capacity and Level of Service
- Access for Emergency Vehicles
- Network Connectivity
- Compliance with the NGIBP Master Plan
- Flexibility for Future Network Connections (e.g. Airport)
- Accommodation for Pedestrians and Cyclists
- Traffic Safety
- Access to Adjacent Lands
- Geometric Standards
- Transit Operations
- Travel Demand Management
- Construction Staging (north of Rymal Road) - Implications on Transportation

Effect on Natural Environment
- Vegetation
- Wildlife
- Aquatic Habitat
- Eramosa Karst
- Stormwater

Effect on Socio-Economic Environment
- Property Requirements for Right-of-Way
  - Residents
    - Driveways and amenities
    - Privacy / use and enjoyment of property
  - Businesses
    - Property requirements
    - Driveways and amenities
- Noise
- Archaeological / Cultural Heritage Resources
- Air Quality
- Agriculture
- Recreation
- Institutions
- Ability to Provide Servicing to Adjacent Lands
- Construction Staging (segment north of Rymal Road) - Implications on Residents / Institutions
- Traffic impacts on local roads adjacent to the study area

Cost Effectiveness
- Utility Relocation
- Capital Costs
- Maintenance and Operation Costs
- Potential for Contamination
- Property Acquisition
- User Costs

Each design alternative is described and assessed in further detail below.
4.1.1.1 Trinity Church Arterial Corridor Alignment Alternatives

The six options identified and assessed include do nothing and alternative alignments for a new 4-lane arterial corridor between the Red Hill Valley Ramps and Stone Church Road intersection to south of Rymal Road. The six options are as follows:

1. **Do Nothing**
   This alternative was included in the assessment to provide a benchmark against which the other design alternatives could be compared.

2. **North-South Connection, East of Existing Trinity Church Road**
   Includes an arterial connection from the Red Hill Valley Parkway and Stone Church Road intersection to south of Rymal Road to accommodate 4 travel lanes (2 per direction).

3. **Extension of Existing Trinity Church Road Alignment**
   Includes an arterial connection from the Red Hill Valley Parkway and Stone Church Road intersection to the existing Trinity Church Road at Rymal Road and a widening of the existing Trinity Church Road south of Rymal Road to accommodate 4 travel lanes (2 per direction).

4. **North-South Connection, between Existing Trinity Church Road and Pritchard Road**
   Includes an arterial connection from the Red Hill Valley Parkway and Stone Church Road intersection to south of Rymal Road to accommodate 4 travel lanes (2 per direction).

5. **North-South Connection, West of Existing Trinity Church Road, Parallel to the Hydro Corridor**
   Includes an arterial connection from the Red Hill Valley Parkway and Stone Church Road intersection to south of Rymal Road to accommodate 4 travel lanes (2 per direction).

6. **North-South Connection, West of Existing Trinity Church Road, connecting to Pritchard Road**
   Includes an arterial connection from the Red Hill Valley Parkway and Stone Church Road intersection to south of Rymal Road to accommodate 4 travel lanes (2 per direction).

The conceptual alternative alignment options are shown in **Exhibit 4-1**.
4.1.1.2 Traffic Control Devices

The traffic control options identified and assessed for the intersections with Stone Church Road, Highland Road, Midblock Collector Road, Rymal Road and the extension of Twenty Road are listed below:

1. **Traffic Signals**
   - Includes the provision of traffic signals and exclusive turning lanes.
2. **Roundabouts**
   - Includes the provision of a roundabout with pedestrian splitter islands.

4.1.1.3 Urban or Rural Drainage Design

The cross-section options identified and assessed for the Trinity Church Arterial Corridor are as follows:

1. **Rural Cross-section**
   - Includes the provision of ditches
2. **Urban Cross-section**
   - Includes the provision of curb and gutter

4.1.2 Evaluation of Design Alternatives

The evaluation of the design alternatives and recommendations were based on the criteria outlined in Section 4.1.1. Reasoned Argument Method was used to evaluate the design alternatives. The reasoned argument can be defined as the art of getting from one sentence to another sentence by valid moves only, using the rules of logic. The Reasoned Argument Method focuses on those criteria that generate a measurable difference between each alternative.

Due to the complexity of a new arterial road alignment, the evaluation was completed in two phases, a long list of alternatives and a short list of alternatives. The long list of alternatives was presented to the public in June 2006. The short list of alternatives was presented to the public in October 2006.
<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Option 1 Indicator</th>
<th>Option 2 Indicator</th>
<th>Option 3 Indicator</th>
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<tbody>
<tr>
<td><strong>TRANSPORTATION SERVICE:</strong></td>
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<tr>
<td>Corridor Capacity and Level of Service</td>
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<td>□</td>
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<tr>
<td>No increase in the capacity of corridor and to overall study area roadway capacity. Additional north-south capacity will be needed. Would result in significant amounts of traffic on local roads in the area, such as Upper Mount Albion Road.</td>
<td>□</td>
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<td>□</td>
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<td>□</td>
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<tr>
<td>Network Connectivity</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>No improvement to network connectivity. Additional north-south connection would be required. Does not provide good access to the Rymal Road Planning Area (ROPA 9) and North Glanbrook Industrial Business Park.</td>
<td>□</td>
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**Table 4-1: Analysis and Evaluation of Design Alternatives for the Trinity Church Arterial Corridor**

**ANALYSIS AND EVALUATION OF DESIGN ALTERNATIVES FOR TRINITY CHURCH ARTERIAL CORRIDOR EXTENSION – Long List of Alternatives**

<table>
<thead>
<tr>
<th>CRITERIA</th>
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<tr>
<td><strong>Transportation Service:</strong></td>
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<td></td>
</tr>
<tr>
<td>Corridor Capacity and Level of Service</td>
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<td></td>
</tr>
<tr>
<td>No increase in the capacity of corridor and to overall study area roadway capacity. Additional north-south capacity will be needed. Would result in significant amounts of traffic on local roads in the area, such as Upper Mount Albion Road.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Network Connectivity</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>No improvement to network connectivity. Additional north-south connection would be required. Does not provide good access to the Rymal Road Planning Area (ROPA 9) and North Glanbrook Industrial Business Park.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
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</tr>
</tbody>
</table>

**LEGEND**

- most preferred
- least preferred

June 2007
### ANALYSIS AND EVALUATION OF DESIGN ALTERNATIVES FOR TRINITY CHURCH ARTERIAL CORRIDOR EXTENSION – Long List of Alternatives

<table>
<thead>
<tr>
<th>CRITERIA</th>
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<th>Option 5</th>
<th>Indicator</th>
<th>Option 6</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance with the NGIBP Master Plan</td>
<td>Does not comply with the NGIBP Master Plan, which identifies the need for protection for a 4-lane arterial connection to the Red Hill Valley Parkway to service the Business Park lands.</td>
<td></td>
<td>Partially complies with the NGIBP Master Plan since it does allow for some additional access to the North Glenbrook Industrial Business Park from the Red Hill Valley Parkway, but is not as direct since traffic would have to cross Trinity Church Road to enter the Business Park.</td>
<td>Complies with the NGIBP Master Plan. It provides good access to the NGIBP with a connection to the Red Hill Valley Parkway.</td>
<td>Complies with the NGIBP Master Plan. It provides good access to the NGIBP with a connection to the Red Hill Valley Parkway. However, it could result in some odd development parcels in some portions of the Business Park.</td>
<td>Complies with the NGIBP Master Plan. It provides good access to the NGIBP with a connection to the Red Hill Valley Parkway. However, it could result in some odd development parcels in some portions of the Business Park.</td>
<td></td>
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</tr>
<tr>
<td>Flexibility for Future Network Connections (e.g. Airport)</td>
<td>No change from existing.</td>
<td></td>
<td>Allows for potential for future network connections; however, is not as flexible as alignments west of the existing Trinity Church Road, due to the presence of the Greenbelt.</td>
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</tr>
<tr>
<td>Accommodation for Pedestrians and Cyclists</td>
<td>No bicycle routes or sidewalks currently exist within the study corridors. The impact of Do Nothing will be the worsening of conditions for pedestrians and cyclists because of the increase in traffic and the fact that no improvements to the ped/cyclist network will be done.</td>
<td>Potential for wide curb lanes and sidewalks on new road to accommodate pedestrians and cyclists. Provides the opportunity to build a portion of the Red Hill Valley Open Space Strategy; however, special consideration of the crossing will be needed.</td>
<td>Potential for wide curb lanes and sidewalks on new road to accommodate pedestrians and cyclists. Provides the opportunity to build a portion of the Red Hill Valley Open Space Strategy; however, special consideration of the crossing will be needed.</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Traffic Safety</td>
<td>Potential for increase in number of collisions on road network, due to increase in traffic volume on substandard road geometry.</td>
<td>Safety of all modes sharing the roadway will be considered and incorporated into the design of the new roadway.</td>
<td>Safety of all modes sharing the roadway will be considered and incorporated into the design of the new roadway.</td>
<td>Safety of all modes sharing the roadway will be considered and incorporated into the design of the new roadway.</td>
<td>Safety of all modes sharing the roadway will be considered and incorporated into the design of the new roadway.</td>
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</tbody>
</table>

**Legend**

- **most preferred**
- **least preferred**

**June 2007**
<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Option 1 Indicator</th>
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<th>Option 5 Indicator</th>
<th>Option 6 Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Adjacent Lands</td>
<td>No change from existing.</td>
<td>Enhanced accessibility between ROPA 9 and North Glanbrook Industrial Business Park and areas to the north and west. Potential for new cross streets connections.</td>
<td>Enhanced accessibility between ROPA 9 and North Glanbrook Industrial Business Park and areas to the north and west. Potential for new cross streets connections.</td>
<td>Enhanced accessibility between ROPA 9 and North Glanbrook Industrial Business Park and areas to the north and west. Potential for new cross streets connections.</td>
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<td>Enhanced accessibility between ROPA 9 and North Glanbrook Industrial Business Park and areas to the north and west. Potential for new cross streets connections.</td>
</tr>
<tr>
<td>Geometric Standards</td>
<td>The vertical alignment on the existing Trinity Church Road south of Rymal Road does not conform to current design standards.</td>
<td>Design standards will be maintained as per City’s requirements. An urban cross-section would be provided north of Rymal Road and a rural cross-section would be provided south of Rymal Road. Available sight lines do not meet requirements for the preferred design speed.</td>
<td>Design standards will be maintained as per City’s requirements. The vertical alignment on the existing Trinity Church Road south of Rymal Road would be corrected to conform to design standards. An urban cross-section would be provided north of Rymal Road and a rural cross-section would be provided south of Rymal Road. Available sight lines do not meet requirements for the preferred design speed.</td>
<td>Design standards will be maintained as per City’s requirements. The intersection at Rymal Road occurs on a horizontal curve and is not ideal. Close spacing of intersection with Rymal Road to intersection of Trinity Church Road / Rymal Road could present difficulties with signalization at both intersections. An urban cross-section would be provided north of Rymal Road and a rural cross-section would be provided south of Rymal Road. Available sight lines do not meet requirements for the preferred design speed.</td>
<td>Design standards will be maintained as per City’s requirements. An urban cross-section would be provided north of Rymal Road and a rural cross-section would be provided south of Rymal Road. Available sight lines do not meet requirements for the preferred design speed.</td>
<td>Design standards will be maintained as per City’s requirements. An urban cross-section would be provided north of Rymal Road and a rural cross-section would be provided south of Rymal Road. Available sight lines do not meet requirements for the preferred design speed.</td>
</tr>
<tr>
<td>Transit Operations</td>
<td>No current transit operations within the study area; potential for transit service in the future could be hampered by traffic congestion.</td>
<td>Potential for transit and resulting improvement in transit service in the study corridor.</td>
<td>Potential for transit and resulting improvement in transit service in the study corridor.</td>
<td>Potential for transit and resulting improvement in transit service in the study corridor.</td>
<td>Potential for transit and resulting improvement in transit service in the study corridor.</td>
<td>Potential for transit and resulting improvement in transit service in the study corridor.</td>
</tr>
</tbody>
</table>

**LEGEND**

- most preferred
- least preferred

June 2007
### ANALYSIS AND EVALUATION OF DESIGN ALTERNATIVES FOR TRINITY CHURCH ARTERIAL CORRIDOR EXTENSION – Long List of Alternatives

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<th>Indicator</th>
<th>Option 6</th>
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</thead>
<tbody>
<tr>
<td>Travel Demand Management</td>
<td>Does not accommodate opportunities to incorporate travel demand management initiatives.</td>
<td></td>
<td>Accommodates for the provision of a carpool lot near the Red Hill Valley Expressway ramps to encourage shared-ride transportation.</td>
<td></td>
<td>Accommodates for the provision of a carpool lot near the Red Hill Valley Expressway ramps to encourage shared-ride transportation.</td>
<td></td>
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<td></td>
<td>Accommodates for the provision of a carpool lot near the Red Hill Valley Expressway ramps to encourage shared-ride transportation.</td>
<td></td>
</tr>
<tr>
<td>Construction Staging (north of Rymal Road) - Implications on Transportation</td>
<td>No implications</td>
<td></td>
<td>Requires extension south of Rymal Road to avoid unacceptable intersection spacing on Rymal Road. High potential use of Trinity Church Road south of connection back to Trinity Church. Will likely require temporary closures of Trinity Church Road.</td>
<td></td>
<td>Highest potential use of Trinity Church Road. Need to upgrade Trinity Church Road south of Rymal Road, which may require temporary terminus at Rymal would result in unacceptable intersection spacing.</td>
<td></td>
<td>Temporary terminus at Rymal would result in unacceptable intersection spacing.</td>
<td></td>
<td>Requires extension south of Rymal Road to avoid unacceptable intersection spacing on Rymal Road. High potential use of Trinity Church Road south of connection back to Trinity Church. Will likely require temporary closures of Trinity Church Road.</td>
<td></td>
<td>Requires extension south of Rymal Road to avoid unacceptable intersection spacing on Rymal Road. High potential use of Trinity Church Road south of connection back to Trinity Church. Will likely require temporary closures of Trinity Church Road.</td>
<td></td>
</tr>
</tbody>
</table>

### SOCIO-ECONOMIC IMPACTS:

| Property Requirements for Right-of-Way | No direct impacts to existing property. | Approximately 14 properties would be impacted. | Approximately 23 properties would be impacted. | Approximately 15 properties would be impacted. | Approximately 11 properties would be impacted. | Approximately 12 properties would be impacted. |
| Residents • Driveways and amenities • Privacy / use and enjoyment of property | No direct impact to residents. | Approximately two houses have to be relocated and potential changes to five existing driveways. Would introduce an industrial road into an area designated for residential and related uses. | Approximately four houses have to be relocated and potential changes to eleven driveways. Would introduce an industrial road into an area designated for residential and related uses. | Approximately five houses have to be relocated and potential changes to one driveway. | Approximately two houses have to be relocated and potential changes to two driveways. | Approximately three houses have to be relocated and potential changes to two driveways. |
| Businesses • Property requirements • Driveways and amenities | No direct impacts to existing businesses. | No change in existing business or employment. Provides for additional opportunities for future business with potential for better access. | No change in existing business or employment. Provides for additional opportunities for future business with potential for better access. | No change in existing business or employment. Provides for additional opportunities for future business with potential for better access. | No change in existing business or employment. Provides for additional opportunities for future business with potential for better access. | No change in existing business or employment. Provides for additional opportunities for future business with potential for better access. |
| Noise • Sensitive receptors experiencing change in sound level (5 dBA and more) over ambient conditions | Potential increase due to increased traffic volumes. | Increase in noise level with increased traffic. Provides opportunities for mitigation to be considered. | Increase in noise level with increased traffic. Provides opportunities for mitigation to be considered. | Increase in noise level with increased traffic. Provides opportunities for mitigation to be considered. | Increase in noise level with increased traffic. Provides opportunities for mitigation to be considered. | Increase in noise level with increased traffic. Provides opportunities for mitigation to be considered. |

### LEGEND

- most preferred
- preferred
- neutral
- least preferred

June 2007
<table>
<thead>
<tr>
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<th>Option 5 Indicator</th>
<th>Option 6 Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archaeological / Cultural Heritage Resources</td>
<td>No anticipated impact on, cultural heritage or built heritage resources. Potential impact on archaeological resources on undisturbed areas.</td>
<td>No anticipated impact on, cultural heritage or built heritage resources. Potential impact on archaeological pre-contact sites on undisturbed areas.</td>
<td>No anticipated impact on archaeological pre-contact sites on undisturbed areas.</td>
<td>No anticipated impact on, cultural heritage or built heritage resources. Potential impact on archaeological resources on undisturbed areas.</td>
<td>No anticipated impact on, cultural heritage or built heritage resources. Potential impact on archaeological resources on undisturbed areas.</td>
<td>No anticipated impact on, cultural heritage or built heritage resources. Potential impact on archaeological resources on undisturbed areas.</td>
</tr>
<tr>
<td>Air Quality</td>
<td>No improvement to air quality. Congestion will continue to degrade air quality with increased vehicle emission due to increased congestion in the study area road network.</td>
<td>Moderate air quality improvement with less traffic congestion in the study area road network.</td>
<td>Moderate air quality improvement with less traffic congestion in the study area road network.</td>
<td>Moderate air quality improvement with less traffic congestion in the study area road network.</td>
<td>Moderate air quality improvement with less traffic congestion in the study area road network.</td>
<td>Moderate air quality improvement with less traffic congestion in the study area road network.</td>
</tr>
<tr>
<td>Agriculture</td>
<td>No change from existing.</td>
<td>Potential impact to agricultural land uses; however, could allow for easier access to/from the fields due to wider lanes which would better accommodate agricultural equipment.</td>
<td>Potential impact to agricultural land uses; however, could allow for easier access to/from the fields due to wider lanes which would better accommodate agricultural equipment.</td>
<td>Potential impact to agricultural land uses; however, could allow for easier access to/from the fields due to wider lanes which would better accommodate agricultural equipment.</td>
<td>Potential impact to agricultural land uses; however, could allow for easier access to/from the fields due to wider lanes which would better accommodate agricultural equipment.</td>
<td>Potential impact to agricultural land uses; however, could allow for easier access to/from the fields due to wider lanes which would better accommodate agricultural equipment.</td>
</tr>
</tbody>
</table>

**Legend**
- Most preferred
- Least preferred

---

City of Hamilton
Trinity Church Arterial Corridor Class Environmental Assessment Study Report Phase 3 and 4

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**iTRANS**
Project # 3349

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June 2007
### Analysis and Evaluation of Design Alternatives for Trinity Church Arterial Corridor Extension - Long List of Alternatives

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Option 1</th>
<th>Indicator</th>
<th>Option 2</th>
<th>Indicator</th>
<th>Option 3</th>
<th>Indicator</th>
<th>Option 4</th>
<th>Indicator</th>
<th>Option 5</th>
<th>Indicator</th>
<th>Option 6</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation</td>
<td>No change from existing. Potential for implementation of proposed Trail for the Red Hill Valley Open Space Replacement Strategy may take longer to construct.</td>
<td>Potential for accommodation of proposed Trail for the Red Hill Valley Open Space Replacement Strategy during construction of the new corridor. However, special consideration will be necessary to ensure the proper integration of multi modes of travel at the crossing.</td>
<td>Potential for accommodation of proposed Trail for the Red Hill Valley Open Space Replacement Strategy during construction of the new corridor. However, special consideration will be necessary to ensure the proper integration of multi modes of travel at the crossing.</td>
<td>Potential for accommodation of proposed Trail for the Red Hill Valley Open Space Replacement Strategy during construction of the new corridor. However, special consideration will be necessary to ensure the proper integration of multi modes of travel at the crossing.</td>
<td>Potential for accommodation of proposed Trail for the Red Hill Valley Open Space Replacement Strategy during construction of the new corridor. However, special consideration will be necessary to ensure the proper integration of multi modes of travel at the crossing.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Institutions</td>
<td>No anticipated impacts to the Trinity United Church or parking lot.</td>
<td>No institutions along corridor.</td>
<td>Potential for higher traffic exposure to the Trinity United Church south of Rymal Road on the west side of Trinity Church Road. The church parking lot is located on the east side of Trinity Church Road. Consideration of pedestrians crossing Trinity Church Road to access the church from the parking lot will be needed.</td>
<td>No institutions along corridor.</td>
<td>No institutions along corridor.</td>
<td>No institutions along corridor.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to Provide Servicing to Adjacent Lands</td>
<td>Does not provide the ability to service the lands north of Rymal Road.</td>
<td>Allows servicing to be provided to the lands north of Rymal Road.</td>
<td>Allows servicing to be provided to the lands north of Rymal Road.</td>
<td>Allows servicing to be provided to the lands north of Rymal Road. However, since the alignment is not centred in the lands, longer service connections will be required.</td>
<td>Allows servicing to be provided to the lands north of Rymal Road. However, since the alignment is not centred in the lands, longer service connections will be required.</td>
<td>Allows servicing to be provided to the lands north of Rymal Road. However, since the alignment is not centred in the lands, longer service connections will be required.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Construction Staging (north of Rymal Road) - Implications on Residents / Institutions</td>
<td>No implications.</td>
<td>Will likely require temporary closures of Trinity Church Road, resulting in detour for residents and potentially to the church.</td>
<td>Will likely require temporary closures of Trinity Church Road, resulting in detour for residents and potentially to the church.</td>
<td>No implications.</td>
<td>No implications.</td>
<td>No implications.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
### Analysis and Evaluation of Design Alternatives for Trinity Church Arterial Corridor Extension—Long List of Alternatives

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Option 1</th>
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<th>Option 5</th>
<th>Indicator</th>
<th>Option 6</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic impacts on local roads adjacent to the study area</td>
<td>Large increases in traffic volumes on local roads in the surrounding area (such as Upper Mount Albion Road), which would lead to related impacts associated with noise and air quality.</td>
<td>New corridor would accommodate diverted traffic from area local roads such as Upper Mount Albion, resulting in a benefit to residents along the local roads.</td>
<td>New corridor would accommodate diverted traffic from area local roads such as Upper Mount Albion, resulting in a benefit to residents along the local roads.</td>
<td>New corridor would accommodate diverted traffic from area local roads such as Upper Mount Albion, resulting in a benefit to residents along the local roads.</td>
<td>New corridor would accommodate diverted traffic from area local roads such as Upper Mount Albion, resulting in a benefit to residents along the local roads.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Natural Environment Impacts:

| Vegetation | No anticipated impact on vegetation. | No significant impact on vegetation. Some shrubs found in the study area. Potential for planting to be incorporated into the design. | No significant impact on vegetation. Some shrubs found in the study area. Potential for planting to be incorporated into the design. | Potential for large impact to woodlot south of Rymal Road; however no impacts to Black Walnut species. Potential for planting to be incorporated into the design. | Potential for small impact to woodlot south of Rymal Road; however would impact Black Walnut species. Potential for planting to be incorporated into the design. | Potential for small impact to woodlot south of Rymal Road; however would impact Black Walnut species. Potential for planting to be incorporated into the design. |

| Wildlife | No anticipated impact on wildlife. | A few species were found in the study area, but no endangered species were identified. | A few species were found in the study area, but no endangered species were identified. | A few species were found in the study area, but no endangered species were identified. | A few species were found in the study area, but no endangered species were identified. | A few species were found in the study area, but no endangered species were identified. |

| Aquatic Habitat | No anticipated impact on aquatic habitat. | No significant impact on aquatic life is identified. Potential impact to a tributary of Hannon Creek. Additional runoff expected due to increased road surface area. Mitigation measures will be provided during detailed design. | No significant impact on aquatic life is identified. Potential impact to a tributary of Hannon Creek. Additional runoff expected due to increased road surface area. Mitigation measures will be provided during detailed design. | No significant impact on aquatic life is identified. Potential impact to two tributaries of Hannon Creek. Crossings would be required at both locations. Additional runoff expected due to increased road surface area. Mitigation measures will be provided during detailed design. | No significant impact on aquatic life is identified. Potential impact to a tributary of Hannon Creek. A crossing of the tributary would be required. Additional runoff expected due to increased road surface area. Mitigation measures will be provided during detailed design. | No significant impact on aquatic life is identified. Potential impact to a tributary of Hannon Creek. A crossing of the tributary would be required. Additional runoff expected due to increased road surface area. Mitigation measures will be provided during detailed design. |

| Eramosa Karst Sink Holes | No anticipated impact on the Eramosa Karst. | Eramosa Karst will not be directly impacted. Potential impacts to two springs (One along the alignment, the second east of the alignment). | Eramosa Karst will not be directly impacted. Potential impacts to one sinkhole. | Eramosa Karst will not be directly impacted. No impacts on sinkholes or springs. | Eramosa Karst will not be directly impacted. No impacts on sinkholes or springs. | Eramosa Karst will not be directly impacted. No impacts on sinkholes or springs. |

| Stormwater Water quantity and quality | No anticipated impact on stormwater. | Additional runoff expected due to increased road surface area. Mitigation measures will be provided during detailed design. | Additional runoff expected due to increased road surface area. Mitigation measures will be provided during detailed design. | Additional runoff expected due to increased road surface area. Mitigation measures will be provided during detailed design. | Additional runoff expected due to increased road surface area. Mitigation measures will be provided during detailed design. | Additional runoff expected due to increased road surface area. Mitigation measures will be provided during detailed design. |

### Legend

- **Most preferred**
- **Least preferred**

June 2007
### ANALYSIS AND EVALUATION OF DESIGN ALTERNATIVES FOR TRINITY CHURCH ARTERIAL CORRIDOR EXTENSION – Long List of Alternatives

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Option 1</th>
<th>Indicator</th>
<th>Option 2</th>
<th>Indicator</th>
<th>Option 3</th>
<th>Indicator</th>
<th>Option 4</th>
<th>Indicator</th>
<th>Option 5</th>
<th>Indicator</th>
<th>Option 6</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Utility Relocation</strong></td>
<td>No anticipated impact on utilities.</td>
<td>☣</td>
<td>Utility relocation is involved. Crosses a gas pipeline between Highland Road and Rymal Road. Crosses a hydro corridor south of Rymal Road.</td>
<td>☣</td>
<td>Utility relocation is involved. Crosses a gas pipeline between Highland Road and Rymal Road. Crosses a hydro corridor south of Rymal Road.</td>
<td>☣</td>
<td>Utility relocation may be involved. Crosses a gas pipeline between Highland Road and Rymal Road. Crosses a hydro corridor south of Rymal Road.</td>
<td>☣</td>
<td>Utility relocation may be involved. Crosses a gas pipeline between Highland Road and Rymal Road. Crosses a hydro corridor south of Rymal Road.</td>
<td>☣</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Capital Cost</strong></td>
<td>No anticipated capital costs.</td>
<td>☣</td>
<td>Costs of constructing approximately 2,940 m of arterial road.</td>
<td>☣</td>
<td>Costs of constructing approximately 2,295 m of arterial road.</td>
<td>☣</td>
<td>Costs of constructing approximately 3,305 m of arterial road.</td>
<td>☣</td>
<td>Costs of constructing approximately 3,255 m of arterial road.</td>
<td>☣</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maintenance and Operation Costs</strong></td>
<td>Potential for increase in operating cost with higher roadway maintenance costs, due to road surface and road base deterioration.</td>
<td>☣</td>
<td>Maintenance costs related to roadway, sidewalks and cycling lanes to better respond to the needs of the residents along the new corridor</td>
<td>☣</td>
<td>Maintenance costs related to roadway, sidewalks and cycling lanes to better respond to the needs of the residents along the new corridor</td>
<td>☣</td>
<td>Maintenance costs related to roadway, sidewalks and cycling lanes to better respond to the needs of the residents along the new corridor</td>
<td>☣</td>
<td>Maintenance costs related to roadway, sidewalks and cycling lanes to better respond to the needs of the residents along the new corridor</td>
<td>☣</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Property Acquisition</strong></td>
<td>No anticipated property acquisition, therefore no property cost.</td>
<td>☣</td>
<td>A portion of approximately 14 properties would need to be acquired.</td>
<td>☣</td>
<td>A portion of approximately 23 properties would need to be acquired.</td>
<td>☣</td>
<td>A portion of approximately 15 properties would need to be acquired.</td>
<td>☣</td>
<td>A portion of approximately 11 properties would need to be acquired.</td>
<td>☣</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>User Costs</strong></td>
<td>Congestion would create delays to users.</td>
<td>☣</td>
<td>The reduced congestion would reduce delays to users, in turn reducing vehicle operating costs.</td>
<td>☣</td>
<td>The reduced congestion would reduce delays to users, in turn reducing vehicle operating costs.</td>
<td>☣</td>
<td>The reduced congestion would reduce delays to users, in turn reducing vehicle operating costs.</td>
<td>☣</td>
<td>The reduced congestion would reduce delays to users, in turn reducing vehicle operating costs.</td>
<td>☣</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### LEGEND

- Most preferred
- Preferred
- Least preferred
- Most least preferred

**June 2007**

36
## SUMMARY OF ANALYSIS AND EVALUATION FOR TRINITY CHURCH ARTERIAL CORRIDOR FOR LONG LIST OF ALTERNATIVES

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
<th>Option 4</th>
<th>Option 5</th>
<th>Option 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendation</td>
<td>Screened Out</td>
<td>Screened Out</td>
<td>Screened Out</td>
<td>Carry Forward for Further Investigation</td>
<td>Carry Forward for Further Investigation</td>
<td>Carry Forward for Further Investigation</td>
</tr>
</tbody>
</table>

- **DO NOTHING**
  - Provides no connection of the Red Hill Valley Parkway ramps at Stone Church Road.

- **NORTH–SOUTH ROAD EAST OF EXISTING TRINITY CHURCH ROAD**
  - Represents connection of Red Hill Valley Parkway ramps at Stone Church Road via a north-south road which runs parallel to existing Trinity Church Rd.

- **EXTENSION OF EXISTING TRINITY CHURCH ROAD**
  - Represents extension of Trinity Church Road from Red Hill Valley Parkway ramps at Stone Church Road to Rymal Road and widening of existing Trinity Church Road south of Rymal Road.

- **NEW NORTH-SOUTH ROAD WEST OF EXISTING TRINITY CHURCH ROAD**
  - Represents connection of Red Hill Valley Parkway ramps at Stone Church Road via a north-south road which runs parallel to existing Trinity Church Rd between Pritchard Road and existing Trinity Church Road.

- **NEW NORTH-SOUTH ROAD West of Existing Trinity Church Road (At Pritchard)**
  - Represents connection of Red Hill Valley Parkway ramps at Stone Church Road via a north-south road which connects to Rymal Road in the vicinity of Pritchard Road and runs parallel to existing Trinity Church Rd south of Pritchard Road.
Based on the long-list evaluation table, **Options 1, 2 and 3** were screened out from further evaluation. Option 1 did not provide sufficient transportation service and would have significant impacts to the social environment. Option 2 would have significant impacts to the Karst and to the residents along existing Trinity Church Road. Option 3 would have significant impacts to cultural heritage resources, archaeological resources and residents along existing Trinity Church Road.

After the long-list of alternatives was reduced to a short-list, **Options 4, 5 and 6** were assessed and evaluated in further detail. The evaluation of the short listed alignments is summarized below in **Table 4-2**.
### Table 4-2: Analysis and Evaluation of Short List Design Alternatives for the Trinity Church Arterial Corridor

**ANALYSIS AND EVALUATION OF DESIGN ALTERNATIVES FOR TRINITY CHURCH ARTERIAL CORRIDOR – SHORT LIST OF ALTERNATIVES**

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Option 4</th>
<th>Indicator</th>
<th>Option 5</th>
<th>Indicator</th>
<th>Option 6</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRANSPORTATION SERVICE:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corridor Capacity and Level of Service</td>
<td>Significant increase in the capacity of corridor and to overall study area roadway capacity. Provides additional two lanes in each direction north of Rymal Road and additional two lanes in each direction south of Rymal Road.</td>
<td></td>
<td>Significant increase in the capacity of corridor and to overall study area roadway capacity. Provides additional two lanes in each direction north of Rymal Road and additional two lanes in each direction south of Rymal Road.</td>
<td></td>
<td>Significant increase in the capacity of corridor and to overall study area roadway capacity. Provides additional two lanes in each direction north of Rymal Road and additional two lanes in each direction south of Rymal Road.</td>
<td></td>
</tr>
<tr>
<td>Access for Emergency Vehicles</td>
<td>Access for emergency vehicles will improve as an additional route choice will be available.</td>
<td></td>
<td>Access for emergency vehicles will improve as an additional route choice will be available.</td>
<td></td>
<td>Access for emergency vehicles will improve as an additional route choice will be available.</td>
<td></td>
</tr>
<tr>
<td>Network Connectivity</td>
<td>Network connectivity will be significantly improved. Provides good network continuity with an additional north-south connection. Allows for good access to ROPA 9 and the North Glenbrook Industrial Business Park.</td>
<td></td>
<td>Network connectivity will be significantly improved. Provides good network continuity with additional north-south connection. Allows for good access to ROPA 9 and the North Glenbrook Industrial Business Park.</td>
<td></td>
<td>Network connectivity will be significantly improved. Provides good network continuity with additional north-south connection. Allows for good access to ROPA 9 and the North Glenbrook Industrial Business Park.</td>
<td></td>
</tr>
<tr>
<td>Flexibility for Future Network Connections (e.g. Airport)</td>
<td>Allows for several potential future network connections.</td>
<td></td>
<td>Allows for several potential future network connections.</td>
<td></td>
<td>Allows for several potential future network connections.</td>
<td></td>
</tr>
<tr>
<td>Compliance with the NGIBP, Master Plan and East Mountain Industrial Business Park / Land Use Coordination</td>
<td>Complies with the Master Plans. It provides good access to the Business Parks with a connection to the Red Hill Valley Parkway.</td>
<td></td>
<td>Complies with the Master Plans. It provides good access to the Business Parks with a connection to the Red Hill Valley Parkway. However, odd shaped parcels will be created along Pritchard Road. Potential to create a carpool lot in the odd-shaped parcels.</td>
<td></td>
<td>Complies with the Master Plans. It provides good access to the Business Parks with a connection to the Red Hill Valley Parkway. However, odd shaped parcels will be created along Pritchard Road. Potential to create a carpool lot in the odd-shaped parcels.</td>
<td></td>
</tr>
<tr>
<td>Accommodation for Pedestrians and Cyclists</td>
<td>Potential for wide curb lanes and sidewalks on new road to accommodate pedestrians and cyclists. Provides the opportunity to build a portion of the Red Hill Valley Open Space Strategy; however, special consideration of the crossing will be needed.</td>
<td></td>
<td>Potential for wide curb lanes and sidewalks on new road to accommodate pedestrians and cyclists. Provides the opportunity to build a portion of the Red Hill Valley Open Space Strategy; however, special consideration of the crossing will be needed.</td>
<td></td>
<td>Potential for wide curb lanes and sidewalks on new road to accommodate pedestrians and cyclists. Provides the opportunity to build a portion of the Red Hill Valley Open Space Strategy; however, special consideration of the crossing will be needed.</td>
<td></td>
</tr>
<tr>
<td>Access to Adjacent Lands</td>
<td>Enhanced accessibility between ROPA 9 and North Glenbrook Industrial Business Park and areas to the north and west. Potential for new midblock connections.</td>
<td></td>
<td>Enhanced accessibility between ROPA 9 and North Glenbrook Industrial Business Park and areas to the north and west. Potential for new midblock connections.</td>
<td></td>
<td>Enhanced accessibility between ROPA 9 and North Glenbrook Industrial Business Park and areas to the north and west. Potential for new midblock connections.</td>
<td></td>
</tr>
<tr>
<td>Geometric Standards</td>
<td>The intersection at Rymal Road occurs on a tangent between two horizontal curves and is not ideal. Available sight lines for some of the turning movements do not meet requirements for the preferred design speed and additional property will be required to maintain the sightlines or an alternate traffic control will be required to reduce the approach speeds at the intersection.</td>
<td></td>
<td>Available sight lines for some of the turning movements do not meet requirements for the preferred design speed and additional property will be required to maintain the sightlines or an alternate traffic control will be required to reduce the approach speeds at the intersection.</td>
<td></td>
<td>Available sight lines for some of the turning movements do not meet requirements for the preferred design speed and additional property will be required to maintain the sightlines or an alternate traffic control will be required to reduce the approach speeds at the intersection.</td>
<td></td>
</tr>
</tbody>
</table>

**LEGEND**

- **most preferred**
- **least preferred**

June 2007

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The geometry of the new midblock collector does not allow for desirable tangent lengths and sight lines. Back to back curves on both Option 6 and the midblock collector are not desirable.

The geometry of the new midblock collector does not allow for desirable tangent lengths. Back to back curves on both Option 6 and the midblock collector are not desirable.

Back to back curves on both Option 6 and the midblock collector are not desirable.

Back to back curves on both Option 6 and the midblock collector are not desirable.

Accessibility to the carpool lot can be provided by the midblock collector.

Accessibility to the carpool lot can be provided by the midblock collector.

Accessibility to the carpool lot could be difficult to accommodate since the Trinity Church Corridor will have restricted access.

Accessibility to the carpool lot could be difficult to accommodate since the Trinity Church Corridor will have restricted access.

Requirements for sight-of-Way: Approximately 13 (7 north of Rymal Road, 6 south of Rymal Road) properties would be impacted.

Requirements for sight-of-Way: Approximately 10 (6 north of Rymal Road, 4 south of Rymal Road) properties would be impacted.

Requirements for sight-of-Way: Approximately 11 (8 north of Rymal Road, 3 south of Rymal Road) properties would be impacted.

Requirements for sight-of-Way: Approximately 11 (8 north of Rymal Road, 3 south of Rymal Road) properties would be impacted.

Access to the carpool lot could be provided in one of the odd-shaped parcels; however, access to/from the carpool lot could be difficult to accommodate since the Trinity Church Corridor will have restricted access.

Access to the carpool lot could be provided in one of the odd-shaped parcels; however, access to/from the carpool lot could be difficult to accommodate since the Trinity Church Corridor will have restricted access.

Accessibility to the carpool lot could be difficult to accommodate since the Trinity Church Corridor will have restricted access.

Accessibility to the carpool lot could be difficult to accommodate since the Trinity Church Corridor will have restricted access.

No anticipated impact on cultural heritage or built heritage resources.

No anticipated impact on cultural heritage or built heritage resources.

No anticipated impact on cultural heritage or built heritage resources.

No anticipated impact on cultural heritage or built heritage resources.

No anticipated impact on cultural heritage or built heritage resources.

Potentially impact on archaeological resources on undisturbed areas.

Potentially impact on archaeological resources on undisturbed areas.

Potentially impact on archaeological resources on undisturbed areas.

Potentially impact on archaeological resources on undisturbed areas.

Potentially impact on archaeological resources on undisturbed areas.

Increase in noise level with increased traffic. There are 3 properties within 50 m and 9 properties within the 50 to 100 m boundary of the new corridor.

Increase in noise level with increased traffic. There are 3 properties within 50 m and 9 properties within the 50 to 100 m boundary of the new corridor.

Increase in noise level with increased traffic. There are 3 properties within 50 m and 9 properties within the 50 to 100 m boundary of the new corridor.

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Increase in noise level with increased traffic. There are 3 properties within 50 m and 9 properties within the 50 to 100 m boundary of the new corridor.

Increase in noise level with increased traffic. There are 4 properties within 50 m and 4 properties within the 50 to 100 m boundary of the new corridor.

Increase in noise level with increased traffic. There are 4 properties within 50 m and 4 properties within the 50 to 100 m boundary of the new corridor.

Increase in noise level with increased traffic. There are 4 properties within 50 m and 4 properties within the 50 to 100 m boundary of the new corridor.

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Increase in noise level with increased traffic. There are 4 properties within 50 m and 4 properties within the 50 to 100 m boundary of the new corridor.

Increase in noise level with increased traffic. There are 4 properties within 50 m and 4 properties within the 50 to 100 m boundary of the new corridor.

Increase in noise level with increased traffic. There are 4 properties within 50 m and 4 properties within the 50 to 100 m boundary of the new corridor.

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Increase in noise level with increased traffic. There are 4 properties within 50 m and 4 properties within the 50 to 100 m boundary of the new corridor.

Increase in noise level with increased traffic. There are 4 properties within 50 m and 4 properties within the 50 to 100 m boundary of the new corridor.
### ANALYSIS AND EVALUATION OF DESIGN ALTERNATIVES FOR TRINITY CHURCH ARTERIAL CORRIDOR – SHORT LIST OF ALTERNATIVES

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Option 4 Indicator</th>
<th>Option 5 Indicator</th>
<th>Option 6 Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation</td>
<td>Potential for accommodation of proposed Trail for the Red Hill Valley Open Space Replacement Strategy during construction of the new corridor. However, special consideration will be necessary to ensure the proper integration of multi modes of travel at the crossing.</td>
<td>Less in keeping with the original intent of the Secondary Plan, which designates light industrial west of the Trinity Church Corridor and service commercial and residential to the east. Results in less developable land. The further west the road is, the more residential/commercial land is created and less light industrial.</td>
<td>Potential for accommodation of proposed Trail for the Red Hill Valley Open Space Replacement Strategy during construction of the new corridor. However, special consideration will be necessary to ensure the proper integration of multi modes of travel at the crossing.</td>
</tr>
<tr>
<td>Development Implications</td>
<td>More in keeping with the original intent of the Secondary Plan, which designates light industrial west of the Trinity Church Corridor and service commercial and residential to the east. Results in more developable land. The further west the road is, the more residential/commercial land is created and less light industrial.</td>
<td>Less in keeping with the original intent of the Secondary Plan, which designates light industrial west of the Trinity Church Corridor and service commercial and residential to the east. Results in less developable land. The further west the road is, the more residential/commercial land is created and less light industrial.</td>
<td></td>
</tr>
<tr>
<td>Traffic Impacts on Local Roads Adjacent to the Study Area</td>
<td>New corridor would accommodate diverted traffic from area local roads such as Upper Mount Albion, resulting in a benefit to residents along the local roads.</td>
<td>New corridor would accommodate diverted traffic from area local roads such as Upper Mount Albion, resulting in a benefit to residents along the local roads.</td>
<td>New corridor would accommodate diverted traffic from area local roads such as Upper Mount Albion, resulting in a benefit to residents along the local roads.</td>
</tr>
<tr>
<td>Ability to Provide Servicing to Adjacent Lands</td>
<td>Allows servicing to be provided to the lands north of Rymal Road. Servicing may be provided south of Rymal during development of lands as part of NGIBP.</td>
<td>Allows servicing to be provided to the lands north of Rymal Road. Servicing may be provided south of Rymal during development of lands as part of NGIBP.</td>
<td>Allows servicing to be provided to the lands north of Rymal Road. Servicing may be provided south of Rymal during development of lands as part of NGIBP.</td>
</tr>
<tr>
<td>Natural Environment Impacts:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetation</td>
<td>Potential impact to Dogwood cultural thickets south of Rymal Road. Potential for planting to be incorporated into the design.</td>
<td>Potential impact to black walnut cultural woodland south of Rymal Road. Potential for planting to be incorporated into the design.</td>
<td></td>
</tr>
<tr>
<td>Wildlife</td>
<td>A few species were found in the study area, but no endangered species were identified. Several bird species are protected by the Migratory birds Convention Act.</td>
<td>A few species were found in the study area, but no endangered species were identified. Several bird species are protected by the Migratory birds Convention Act.</td>
<td></td>
</tr>
<tr>
<td>Aquatic Habitat</td>
<td>No anticipated impact on aquatic life. Potential impact to two tributaries of Hannon Creek; however, the crossings are not well defined channels and no aquatic habit has been identified in the crossings. Crossings would be required at both locations.</td>
<td>No anticipated impact on aquatic life. Potential impact to one tributary of Hannon Creek; however, the crossings are not well defined channels and no aquatic habit has been identified in the crossings. A crossing of the tributary would be required.</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>Additional runoff expected due to increased road surface area.</td>
<td>Additional runoff expected due to increased road surface area.</td>
<td>Additional runoff expected due to increased road surface area.</td>
</tr>
<tr>
<td>Costs:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>Crosses a gas pipeline between Highland Road and Rymal Road. Crosses a hydro corridor south of Rymal Road. Crosses a bell eastment north of Rymal Road.</td>
<td>Crosses a gas pipeline between Highland Road and Rymal Road. Crosses a hydro corridor south of Rymal Road. Crosses a bell eastment north of Rymal Road.</td>
<td>Crosses a gas pipeline between Highland Road and Rymal Road. Crosses a hydro corridor south of Rymal Road. Crosses a bell eastment north of Rymal Road.</td>
</tr>
<tr>
<td>Capital Cost</td>
<td>Costs of constructing approximately 1,075 m of arterial road north of Rymal Road and 2,230 m of arterial road south of Rymal Road.</td>
<td>Costs of constructing approximately 1,075 m of arterial road north of Rymal Road and 2,205 m of arterial road south of Rymal Road.</td>
<td>Costs of constructing approximately 1,055 m of arterial road north of Rymal Road and 2,220 m of arterial road south of Rymal Road.</td>
</tr>
<tr>
<td>Maintenance and Operation Costs</td>
<td>Costs of maintaining approximately 1,075 m of arterial road north of Rymal Road and 2,230 m of arterial road south of Rymal Road.</td>
<td>Costs of maintaining approximately 1,055 m of arterial road north of Rymal Road and 2,205 m of arterial road south of Rymal Road.</td>
<td>Costs of maintaining approximately 1,055 m of arterial road north of Rymal Road and 2,220 m of arterial road south of Rymal Road.</td>
</tr>
<tr>
<td>Property Acquisition</td>
<td>Will require property acquisition for approximately 64,500 square metres north of Rymal Road and approximately 100,350 square metres south of Rymal Road.</td>
<td>Will require property acquisition for approximately 63,800 square metres north of Rymal Road and approximately 99,225 square metres south of Rymal Road.</td>
<td>Will require property acquisition for approximately 63,300 square metres north of Rymal Road and approximately 99,900 square metres south of Rymal Road.</td>
</tr>
</tbody>
</table>

**Legend:**

- Most preferred
- Least preferred

June 2007
## SUMMARY OF ANALYSIS AND EVALUATION FOR TRINITY CHURCH ARTERIAL CORRIDOR FOR SHORT LIST OF ALTERNATIVES

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Option 4</th>
<th>Option 5</th>
<th>Option 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NEW NORTH-SOUTH ROAD WEST OF EXISTING TRINITY CHURCH ROAD (BETWEEN PRITCHARD AND TRINITY CHURCH ROAD)</td>
<td>NEW NORTH-SOUTH ROAD WEST OF EXISTING TRINITY CHURCH ROAD (EAST OF PRITCHARD)</td>
<td>NEW NORTH-SOUTH ROAD WEST OF EXISTING TRINITY CHURCH ROAD (AT PRITCHARD)</td>
</tr>
<tr>
<td></td>
<td>Represents connection of Red Hill Valley Parkway ramps at Stone Church Road via a north-south road which runs parallel to existing Trinity Church Rd between Pritchard Road and existing Trinity Church Road.</td>
<td>Represents connection of Red Hill Valley Parkway ramps at Stone Church Road via a north-south road which connects to Rymal Road in the vicinity of Pritchard Road and runs parallel to existing Trinity Church Rd south of Pritchard Road.</td>
<td>Represents connection of Red Hill Valley Parkway ramps at Stone Church Road via a north-south road which connects to Rymal Road at Pritchard Road and runs parallel to existing Trinity Church Rd south of Pritchard Road.</td>
</tr>
<tr>
<td>Transportation Service</td>
<td><img src="green" alt="Most Preferred" /></td>
<td><img src="green" alt="Most Preferred" /></td>
<td><img src="green" alt="Most Preferred" /></td>
</tr>
<tr>
<td>Social Environment</td>
<td><img src="green" alt="Preferred" /></td>
<td><img src="green" alt="Preferred" /></td>
<td><img src="green" alt="Preferred" /></td>
</tr>
<tr>
<td>Natural Environment</td>
<td><img src="green" alt="Preferred" /></td>
<td><img src="green" alt="Preferred" /></td>
<td><img src="green" alt="Preferred" /></td>
</tr>
<tr>
<td>Costs</td>
<td><img src="green" alt="Preferred" /></td>
<td><img src="green" alt="Preferred" /></td>
<td><img src="green" alt="Preferred" /></td>
</tr>
<tr>
<td>Recommendation</td>
<td><strong>Recommended</strong></td>
<td>Not Recommended</td>
<td>Not Recommended</td>
</tr>
</tbody>
</table>

**LEGEND**

- ![Most Preferred](green)
- ![Preferred](green)
- ![Neutral](gray)
- ![Least Preferred](red)

June 2007
Based on the short-list evaluation table, **Option 4 – New North-South Road west of existing Trinity Church Road (between Pritchard Road and Trinity Church Road)** is the preferred alignment. Alignment 4 is the most preferred from a land use perspective. It is more in keeping with the original intent of the Secondary Plan, which designates light industrial west of the Trinity Church Corridor and service commercial and residential to the east. It also results in more developable land. The further west the road is, the more residential/commercial land is created and less light industrial. It avoids any impacts to the sensitive Black Walnut cultural woodlot. No significant environmental impacts are anticipated. Alignment Option 4 also provides adequate tangent lengths for the appropriate design speed. It also allows for better geometry for the midblock collector.

### 4.1.2.1 Traffic Control Devices

An evaluation of the potential traffic controls for the Trinity Church Arterial Corridor was completed for the 2021 time horizon (Trinity Church Corridor extends south of Rymal Road). A number of evaluation criteria were considered. A summary of the evaluation of alternatives is provided in the table below.

**Table 4-3: Evaluation of Traffic Control Alternatives**

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>Option 1 TRAFFIC SIGNALS</th>
<th>Option 2 ROUNDABOUTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capacity</strong> (LOS for AM and PM peak hours shown)</td>
<td>Level of service (LOS) results for the AM / PM peak hours is shown below.</td>
<td>Level of service (LOS) results for the AM / PM peak hours is shown below.</td>
</tr>
<tr>
<td></td>
<td>▪ Stone Church Road – LOS D / LOS C</td>
<td>▪ Stone Church Road – LOS A / LOS B</td>
</tr>
<tr>
<td></td>
<td>▪ Highland Road – LOS B / LOS B</td>
<td>▪ Highland Road – LOS A / LOS A</td>
</tr>
<tr>
<td></td>
<td>▪ Midblock Collector – LOS B / LOS B</td>
<td>▪ Midblock Collector – LOS A / LOS A</td>
</tr>
<tr>
<td></td>
<td>▪ Rymal Road – LOS C / LOS D</td>
<td>▪ Rymal Road – LOS A / LOS F</td>
</tr>
<tr>
<td><strong>Human Factors / Driver Expectations / Safety</strong></td>
<td>▪ Low potential for sideswipe collisions</td>
<td>▪ Lowers operational speeds.</td>
</tr>
<tr>
<td></td>
<td>▪ Potential for red light crossing at high vehicle speed with potential severe right angle collisions</td>
<td>▪ Provides fewer vehicle-vehicle conflict points</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Severity of any collisions would be reduced and it is anticipated that fewer fatal collisions will occur based on the anticipated lower approach speeds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Eliminates potential right angle collisions</td>
</tr>
<tr>
<td><strong>Impacts to Residents, Businesses, Institutions</strong></td>
<td>▪ Less property needed</td>
<td>▪ Stone Church Road – development lands on northeast quadrant / vacant lands on other quadrants</td>
</tr>
<tr>
<td></td>
<td>▪ Vehicular access to adjacent properties will likely be more restricted with signals.</td>
<td>▪ Highland Road – dwellings on north and south side of Highland Road</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Midblock Collector – vacant /</td>
</tr>
<tr>
<td>FACTOR</td>
<td>Option 1</td>
<td>Option 2</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>TRAFFIC SIGNALS</strong></td>
<td>agricultural lands</td>
<td>- Rymal Road – dwellings / businesses on north and south side of Rymal Road</td>
</tr>
<tr>
<td></td>
<td>- Added benefit of traffic calming</td>
<td>- Added benefit of potential landscaping / streetscaping</td>
</tr>
<tr>
<td><strong>Accommodation of Pedestrians and Cyclists</strong></td>
<td>- Pedestrians will be provided with appropriate cross walks and crossing time with protected right of way at the signalized intersections</td>
<td>- Splitter islands are provided in the design to create a midpoint refuge area so that pedestrians are only dealing with crossing one direction (2 lanes) of traffic flow at a time with fewer conflict points. Crossing distance is shorter and vehicle speeds are slower. Additional technologies would be required to accommodate for visually impaired persons crossing roundabouts. Specific training and education would be necessary.</td>
</tr>
<tr>
<td></td>
<td>- Cyclists will be provided with bike lanes along Pritchard Road/Trinity Church Arterial Corridor</td>
<td>- Cyclists will be provided with a bike path along Pritchard Road/Trinity Church Arterial Corridor and they may have difficulties manoeuvring through a roundabout. Experienced cyclists may negotiate the roundabout as they are considered vehicles. Roundabout can be designed with a cycle ramp in advance of and beyond the roundabout that will give riders an opportunity to leave the roadway, dismount and walk across the roundabout as a pedestrian. This could create some user confusion and may require education and guidance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Midblock Collector - opportunity exists to create a safe and attractive pedestrian crossing for the multi-use trail by use of a roundabout. The preferred alternative is a round about.</td>
</tr>
<tr>
<td><strong>Vehicle Emissions</strong></td>
<td>Higher emission due to more vehicle idling time/delay.</td>
<td>Generally reduced vehicle emissions due to less stopping activity, hence more environmentally friendly. Average delay in seconds for the AM / PM peak hours is shown below.</td>
</tr>
<tr>
<td></td>
<td>Average delay in seconds for the AM / PM peak hours is shown below.</td>
<td>- Stone Church Road – 8 / 13</td>
</tr>
<tr>
<td></td>
<td>- Stone Church Road – 42 / 26</td>
<td>- Highland Road – 4 / 4</td>
</tr>
<tr>
<td></td>
<td>- Highland Road – 11 / 17</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Midblock Collector – 12 / 18</td>
<td></td>
</tr>
</tbody>
</table>
In consideration of the overall net benefit, the City of Hamilton prefers the roundabout option at the intersection with Rymal Road, Midblock Collector, Highland Road and Twenty Road.

The roundabout intersections are currently under further detailed assessment/review by Ourston Roundabouts Canada. The feasibility of a 3 lane roundabout will also be investigated for the improvement of LOS at the proposed Rymal Road Roundabout. Should the roundabouts be determined unfeasible (or expensive at site specific locations) prior to detailed design, signalization will be implemented, where warranted.

### 4.1.2.2 Urban or Rural Drainage Design

An urban cross-section (curb and gutter) with sidewalks was deemed appropriate for the Trinity Church Corridor north of Rymal Road given the planned development for the area and a rural cross-section (ditches) was deemed appropriate for the Trinity Church Corridor south of Rymal Road since it is more fitting for the North Glanbrook Industrial Business Park.

### 4.1.3 Summary of the Preferred Design

The preliminary preferred design for transportation improvements for the Trinity Church Arterial Corridor includes:
- Alignment between existing Trinity Church Road and Pritchard Road (Option 4) to accommodate 4 travel lanes (2 per direction).
- Provision of traffic signal and exclusive turn lanes at the intersection with Stone Church Road.
- Provision of a roundabout at the intersections with Highland Road, Midblock Collector, Rymal Road and Twenty Road, subject to confirmation through detailed assessment. Should the roundabouts be determined unfeasible during detailed design, signalization will be implemented, where warranted.
- Provision of an urban cross-section north of Rymal Road and rural cross-section south of Rymal Road.
4.2 Phase 3 and 4 Public Consultation

Complete summaries of the public meetings, along with project team responses to questions / issues are provided in Appendix A.3.

During the Phase 3 and 4 process of the Trinity Church Arterial Corridor EA, the public consultation process involved the following activities:

- Meeting with Six Nations Council June 6, 2006
- Consultants and their Developers Meeting June 19, 2006
- Public Information Centre #2 June 26, 2006
- Stakeholder Committee Meeting October 2, 2006
- Public Information Centre #3 October 12 & October 18, 2006

Meeting with Six Nations Council

Representatives of the City and the consultant team met with the Six Nations Council during the Trinity Church Arterial Corridor design alternatives phase of the project. This meeting provided the Six Nations Council with an opportunity to discuss the status of the Master Plan project, the Master Plan recommendations and issues of concern for the Six Nations. Two representatives of the Six Nation Council (not including the project team members) were present at the meeting. Many items were discussed, including:

- Project update;
- ROPA 9 Master Plan recommended solutions; and
- Concerns / Issues.

A copy of correspondence with the Six Nations Council, including meeting minutes is included in Appendix A.5.

Developers and Their Consultants Meeting #1

Representatives of the City and the consultant team met with the Developers and their Consultants during the Trinity Church Arterial Corridor design alternatives phase of the project. This meeting provided the developers and their consultants an opportunity to discuss the status of the Master Plan project, and the results of the transportation assessment for the Trinity Church Arterial Corridor design alternatives. Seven developers and their consultants (not including the project team members) were present at the meeting. Many items were discussed, including:

- Project update;
- Trinity Church Arterial Corridor design alternatives and short-listed alternatives; and
- Trinity Church Arterial Corridor public consultation.

A copy of the meeting minutes is included in Appendix A.4.
Second Public Information Centre (PIC #2)

The Second Public Information Centre (PIC#2) for the Trinity Church Arterial Corridor Environmental Assessment Study, was held on Monday, June 26th, 2006 from 6:30 to 8:30 PM at the Salvation Army Church Gym, 300 Winterberry Drive (at Paramount Drive), in the City of Hamilton. The purpose of PIC#2 was to provide information about the Study to the public and at the same time obtain public input. Twenty-nine panels were displayed. The information panels included the following information for the Trinity Church Arterial Corridor:

1. Welcome and study area
2. Description of the study background
3. Chart of the Class EA process
4. Description of the public consultation plan
5. Summary of the needs and opportunities for the area
6. Problem and opportunity statement for the study area
7. Existing official plan policies and other applicable policies
8. Description of existing conditions
9. ROPA 9 alternative solutions
10. North Glanbrook Industrial Business Park alternative solutions
11. Summary of public information comments from the related EA and Transportation Master Plans
12. Alternative design concepts
13. Design alternatives assessment criteria
14. Chart of the evaluations of design alternatives
15. Alternatives carried forward
16. Future actions
17. Contact information

The public was advised about the meeting through advertisements in the local paper. Advertisements were placed in the Hamilton Spectator on Friday, June 16, 2006 and Friday, June 23, 2006, and in the Brabant paper on Friday, June 16, 2006 informing the public of the PIC. Notification letters were also mailed out to property owners within the study area, to other individuals who had responded with an interest in the study since its commencement, to conservation authorities, Federal and Provincial agencies, and utility companies. A copy of the advertisement is provided in Appendix A.2.

The format was an informal drop-in centre from 6:30 to 8:30 PM to meet the project team and to view the display panels and drawings. Attendees were asked to sign-in and were invited to fill-in comment forms at their convenience within a 2-week time frame.

Approximately 60 members of the public attended the PIC. Representatives from the project team attended the PIC to discuss the details of the project and answer questions of the public. A full summary of the PIC is provided in Appendix A.3.
The consultant team compiled comments and questions received from the public via returned comment sheets and e-mail. Key public comments provided on the Trinity Church Arterial Corridor design phase included the following:

- Use existing roads instead of building new ones;
- It is difficult to turn left onto Rymal from Trinity Church Road;
- Option 3 should be the preferred alignment; and
- Option 6 should be the preferred alignment.

**Stakeholder Committee Meeting #3 (SC #3)**

Representatives of the City and the consultant team met with the Stakeholder Committee during the Trinity Church Arterial Corridor design alternatives phase of the project. This meeting provided the SC members an opportunity to discuss the status of the Master Plan project, and the results of the transportation assessment for the Trinity Church Arterial Corridor design alternatives. Six members of the SC (not including the project team members) were present at the meeting. Many items were discussed, including:

- Project update;
- Trinity Church Arterial Corridor design alternatives;
- Trinity Church Arterial Corridor timing; and
- Trinity Church Arterial Corridor public consultation.

A copy of the SC#3 meeting minutes is included in **Appendix A.4**.

**Third Public Information Centre (PIC#3)**

The Third Public Information Centre (PIC#3) for the Trinity Church Arterial Corridor Environmental Assessment Study, was held on Thursday, October 12th, 2006 from 6:00 to 8:00 PM and on Wednesday, October 18th, 2006 from 6:00 to 8:00PM at the Salvation Army Church Gym, 300 Winterberry Drive (at Paramount Drive), in the City of Hamilton. The purpose of PIC#3 was to provide information about the Study to the public and at the same time obtain public input. Twenty-two panels were displayed. The information panels included the following information for the Trinity Church Arterial Corridor:

1. Welcome
2. Study Area
3. Study Background
4. Class Environmental Assessment Process
5. Study Public Consultation Plan
6. Problem and Opportunity Statement
7. Description of Trinity Church Arterial Corridor Design Alternatives
8. Description of Design Alternatives Assessment Criteria
9. Trinity Church Arterial Corridor Short-List Design Alternatives Evaluation
10. Description of the Design Criteria for Trinity Church Arterial Corridor
11. Identification and Description of Preferred Trinity Church Arterial Corridor Design Alternative
12 Functional Design Plans and Cross Sections
13 Summary of Impacts and Mitigative Measures
14 Future Actions and Contact Information

The public was advised about the October 12 meeting through advertisements in the local paper. Advertisements were placed in the Hamilton Spectator on Friday, September 29, 2006 and Friday, October 6, 2006, and in the Brabant papers (Mountain News, Glanbrook Gazette and Stoney Creek News) on Friday, September 29, 2006.

The public was advised about the October 18 meeting through advertisements in the local paper. Advertisements were placed in the Hamilton Spectator on Friday, October 6, 2006 and Friday, October 13, 2006, and in the Brabant papers (Mountain News, Glanbrook Gazette and Stoney Creek News) on Friday, October 6, 2006.

Notification letters were also mailed out to property owners within the Study Area, to other individuals who had responded with an interest in the Study since its commencement, to conservation authorities, Federal and Provincial agencies, and utility companies. A copy of the advertisement is provided in Appendix A.2.

The format was an informal drop-in centre from 6:00 to 8:00 PM to meet the project team and to view the display panels and drawings. Attendees were asked to sign-in and were invited to fill-in comment forms at their convenience within a 2-week time frame.

Approximately 60 members of the public attended the October 12, 2006 PIC and approximately 80 members of the public attended the October 18, 2006 PIC. Representatives from the project team attended the PIC to discuss the details of the project and answer questions of the public. A full summary of the PIC is provided in Appendix A.3.

The consultant team compiled comments and questions received from the public via returned comment sheets and e-mail. Key public comments provided on the Trinity Church Arterial Corridor design phase included the following:
- Option 6 is my preferred route; and
- Keep the North Glanbrook Industrial Business Park traffic contained. Do not provide a connection to Trinity Church Road from the Trinity Church Arterial Corridor.
5. SELECTED DESIGN, ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES

Inherent in the consideration of potential changes to existing conditions associated with transportation projects, is the significance of any impacts and the extent to which these impacts may be mitigated. Significance is related to importance in a local, regional, provincial or national context, and importance, relative to other identified sensitive areas and issues. This section describes the engineering features, and examines the anticipated environmental effects and mitigation measures for the relevant components of the natural, socio-economic and cultural environments for the preferred design alternative.

5.1 Recommended Alternative

This section describes the engineering features of the recommended design alternative for the Trinity Church Arterial Corridor. The preliminary design plan and typical cross-sections are included in Appendix B.

The technically preferred Design Alternative for the Trinity Church Arterial Corridor includes:

- A new 4 lane (2 through lanes in each direction) arterial corridor from the Red Hill Valley Parkway-Stone Church Road intersection to south of Rymal Road.
- Provision of traffic signals at the intersection with Stone Church Road.
- Provision of a roundabout at the intersections with Highland Road, Midblock Collector, Rymal Road and Twenty Road. The roundabout intersections are subject to further assessment during detailed design. Should the roundabouts be determined unfeasible during detailed design, signalization will be implemented, where warranted.
- Provision of an urban cross-section for the Trinity Church Arterial Corridor north of Rymal Road and a rural cross-section south of Rymal Road.

Details regarding the design of the recommended alternative are contained in the following sections.

5.1.1 Geometric Design

Horizontal Alignment

The preferred alignment is alignment Option 4, which is located between Pritchard Road and the existing Trinity Church Road. The horizontal alignment of the Trinity Church Arterial Corridor will comply with the Transportation Association of Canada Geometric Design Guidelines for a design speed of 90km/h. The alignment of the existing RHVP Ramp will be verified and necessary adjustments, if needed, may be made for the south leg to align with the north leg during detailed design. The alignment is shown on the design plates provided in Appendix B.1.
**Vertical Alignment**

The vertical alignment of the Trinity Church Arterial Corridor will comply with the Transportation Association of Canada *Geometric Design Guidelines* for a design speed of 90km/h.

**Typical Cross-Sections**

Typical cross-sections were developed to anticipate right-of-way needs for the Trinity Church Arterial Corridor, and include the following:
- 4-lanes
- Shoulders (south of Rymal Road)
- Curb and Gutter (north of Rymal Road)
- Exclusive turning lanes
- Sidewalks
- Bike lanes (north of Rymal), bike path (south of Rymal)
- Streetscaping, where feasible
- Utilities
- Median

**Accommodation for Transit**

The City of Hamilton’s *Promoting Public Transit Policy Paper* states that a goal of providing at least 90% of residents and employees within the City with transit service within 400 metres (5 minute walk) should be established. Transit improvements will be required to service the NGIBP and East Mountain Business Park lands. As development proceeds, transit service should be re-examined along the Trinity Church Arterial Corridor. Stops could be provided at Highland Road, Midblock Collector Road, Rymal Road, and the extension of Twenty Road. The Trinity Church Arterial Corridor provides a strategic location for transit service due to its vicinity to the Lincoln Alexander Parkway, Red Hill Valley Parkway, ROPA 9 lands, and North Glanbrook Industrial Business Park. The opportunity for transit service will need to balance the operational cost-effectiveness, strategic objectives, and providing a service to the community.

In discussions with the City of Hamilton, it was noted that consideration should be given to bus bays at all potential transfer points along the Trinity Church Arterial. Guidelines from the City of Hamilton for bus stops indicate a 25m taper, and 40m parallel length prior to the bus stop, with an additional 25m parallel length to the intersection from the bus stop. The possibility of providing bus bays on the near side of the intersections was reviewed for corridor and potential stops have been identified. The provision of bus bays will be reviewed during detail design.

**Accommodations for Pedestrians and Cyclists**

The City of Hamilton’s *Walking and Cycling Policy Paper* has recommended that the existing network of pedestrian and bicycle infrastructure be improved and expanded. It also
recognizes that these uses should be considered in the establishment of the right-of-way and the design of new roads, and the reconstruction of existing roads. As such, the preferred design for the Trinity Church Arterial Corridor allows for a 2.0 m sidewalk, above the 1.5 m minimum, on both sides of the roadway, a 1.8 m on-road bike lane north of Rymal Road and a 3.0 m paved shoulder south of Rymal Road. The preferred location for the bike facilities will be identified through the future functional design / feasibility study for the installation of bike lanes along Pritchard Road.

**Pavement Design**

The recommended pavement design should be consistent with City of Hamilton standards.

**Streetscaping**

Locations where streetscaping can be feasibly accommodated will be determined during detail design, as per the typical cross sections (Appendix B.2).

### 5.1.2 Design Criteria

The preliminary design criteria for the recommended design concepts for the Trinity Church Arterial Corridor are summarized below.

An urban cross-section (curb and gutter) with sidewalks was deemed appropriate for Trinity Church Arterial Corridor, north of Rymal Road, given the planned development for the area, and also since urban cross-sections are typically implemented on all roadways within the urban area. A rural cross-section (ditches) without sidewalks was deemed appropriate for Trinity Church Arterial Corridor, south of Rymal Road, given the planned development for the area.

<table>
<thead>
<tr>
<th>Trinity Church Corridor: New Classification – Urban Arterial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right of Way</td>
</tr>
<tr>
<td>60 m (north of Rymal Road)</td>
</tr>
<tr>
<td>45 m minimum (south of Rymal Road)</td>
</tr>
<tr>
<td>Basic Number of Lanes</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>Posted Speed Limit</td>
</tr>
<tr>
<td>N/A</td>
</tr>
<tr>
<td>Design Speed Limit</td>
</tr>
<tr>
<td>90 km/hr</td>
</tr>
<tr>
<td>Minimum Radius</td>
</tr>
<tr>
<td>600 m min (at 2% superelevation)</td>
</tr>
<tr>
<td>Maximum Grade</td>
</tr>
<tr>
<td>4.5%</td>
</tr>
<tr>
<td>Minimum Grade</td>
</tr>
<tr>
<td>0.75%</td>
</tr>
<tr>
<td>Vertical Curves(^{1,2})</td>
</tr>
<tr>
<td>k = 32-53 crest</td>
</tr>
<tr>
<td>k = 30-40 sag; (headlight control)</td>
</tr>
</tbody>
</table>
Lane Widths

- through
  - left turn
    - right turn
  - Storage length required + 15 m, or 30 m min

Tangent Length for Intersection Approaches

Tangent Length between Curves

Intersection Angle

Median at Intersections

Minimum Stopping Sight Distance

Intersection radius

Sight Triangles

- arterial to collector
  - arterial to arterial
  - arterial to local

Max. grade through intersections

Bike Lane

Sidewalk width

<table>
<thead>
<tr>
<th>Note:</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The combination of all design elements, including required motorists turning and stopping sightlines at intersections and access points, must be met.</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Length of vertical curve in m, not to be less than the design speed in km/h</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Lane widening through horizontal curves should be applied for tractor trailer units</td>
</tr>
</tbody>
</table>

5.1.3 Drainage and Stormwater Management

New stormwater management facilities will be required for this new road. Stormwater management requirements were estimated for water quantity, water quality and erosion control based on the 2003 Stormwater Management Planning and Design Manual (MOE, 2003). In general, the following sizing requirements were used to develop specific requirements:

- Quantity control requirements were estimated based on controlling post development flows to pre development levels for all storms up to and including the 100 year storm.
- Level 2 quality requirements were developed. This is consistent with requirements identified in earlier facilities.
- Erosion control requirements were estimated based on providing erosion control storage for a 25mm rainfall.
- The total volume required was equal to the quantity control storage volume plus the larger of the quality control or erosion control volumes. This is based on the Stormwater Management Planning and Design Manual.
- Area requirements for facilities were calculated based on a preferred extended detention storage depth of 1.0m and a 3:1 length to width ratio.
The following sections present the specific requirements. Where applicable, water quantity, water quality and erosion control requirements were identified.

Proposed stormwater management facilities for the proposed Trinity Church Arterial Corridor will need to consider controlling post development flows to pre-development levels, quality control and erosion control. Stormwater from this area will discharge into Outlet 1 and eventually into Hannon Creek.

Proposed stormwater management facilities for the Trinity Church Arterial Collector were estimated considering controlling post development flows to pre-development levels, quality control and erosion considerations. Stormwater from the roadway will be conveyed to Hannon Creek. To maintain post development flows at pre-development levels for the 100 year storm will require a total storage volume of 2,400 m$^3$. An additional storage volume of 1,807 m$^3$ will be required to provide Level 2 quality control. Finally, a storage volume of 1,210 m$^3$ will be required to provide erosion control. The sizing of the stormwater management pond has not considered any external drainage areas but has considered matching pre-development conditions over a range of storm events for the road allowance.

To meet stormwater management requirements, a wet pond with extended detention with a total storage volume of 4,207 m$^3$ will be required. To accommodate this volume, a total area of 4,207 m$^2$ or 4.02 ha is required and can be accommodated within the Trinity Church Arterial Corridor right-of-way.

XCG also notes that: “The City’s recently completed Stormwater Master Plan identified a preferred strategy for this area as “business as usual with urban retrofits”. This strategy is a continuation of convention stormwater management activities in new development areas augmented by the implementation of source, conveyance and end of pipe controls within existing areas. As such, the preferred alternative of a wet pond sized for Level 2 is consistent with Stormwater Master Plan.”

These requirements should be considered as conceptual in nature and should be confirmed following consultation with affected agencies and through the detailed design of facilities.

5.1.4 Utilities

Several utilities are located within the study area. These include Union Gas, Hamilton Hydro, Bell Canada, Hydro One and Cable. A summary of the potential impact on each utility is provided below.

Hamilton Hydro

Approximately four streetlighting poles on the south side of Highland Road will need to be relocated to accommodate the roundabout at the intersection with the Trinity Church Arterial Corridor. Approximately three hydro poles on the south side of Rymal Road will need to be
relocated to accommodate the roundabout at the intersection with the Trinity Church Arterial Corridor.

**Union Gas**

An existing buried gas line is located on the south and north sides of Rymal Road in the study area. No impacts are anticipated to the existing buried gas line within the study area, since no changes are proposed to the Rymal Road vertical alignment. Sufficient cover should be maintained.

**Water**

Existing buried water lines are located near the centreline of Rymal Road and on the south side of Highland Road. No impacts are anticipated to the existing buried water lines within the study area, since no changes are proposed to the Rymal Road and Highland Road vertical alignment. Sufficient cover should be maintained.

**Sewer**

An existing buried sewer line is located on the south side of Rymal Road. An existing buried sewer line is located near the centreline of Highland Road, west of the proposed intersection with Trinity Church Arterial Corridor. No impacts are anticipated to the existing buried sewer lines within the study area, since no changes are proposed to the Rymal Road and Highland Road vertical alignment. Sufficient cover should be maintained.

**Bell Canada**

Impacts are anticipated for the overhead Bell facility on the south side of Rymal Road at the intersection with Trinity Church Arterial Corridor. The Bell facility is located on the Hydro poles, three of which will need to be relocated. Impacts are anticipated for the overhead Bell facility on the south side of Highland Road at the intersection with Trinity Church Arterial Corridor. The Bell facility is located on the Hydro poles, four of which will need to be relocated. Impacts on overhead facilities are subject to relocation of Hamilton hydro poles. There is an existing bell easement which crosses the Trinity Church Arterial Corridor in an east-west direction, north of Rymal Road. The easement appears to be inactive at this time and not conduits are currently present.

**Cable**

An existing overhead cable line is located on the south side of Rymal Road. The Bell facility is located on the Hydro poles, three of which will need to be relocated.

Formal definition of impacts on utilities will be determined during detailed design. All utility information should be updated prior to construction to ensure that the data is accurate and to finalize relocation requirements as necessary.
Pipelines

An existing 406.4mm high pressure petroleum products pipeline (Trans-Northern Pipelines) exists within the north-south hydro corridor easement in the study area, east of Pritchard Road. Another pipeline (TransCanada) exists within the east-west hydro corridor easement in the study area, south of Rymal Road.

Formal definition of impacts on utilities will be determined during detailed design. All utility information should be updated prior to construction to ensure that the data is accurate and to finalize relocation requirements as necessary.

5.1.5 Illumination and Traffic Signals

The need for and type of illumination within the Trinity Church Arterial Corridor is to be confirmed at the detailed design stage. Given that the Trinity Church Arterial Corridor will be a 4-lane cross-section with a median, illumination will be required on both sides of the roadway throughout the corridor.

New traffic signals are recommended at the intersection of Trinity Church Arterial Corridor with Stone Church Road.

5.1.6 Closure of Upper Mount Albion Road

The need for closure of Upper Mount Albion Road was identified in the ROPA 9 Master Plan. The ultimate closure of Upper Mount Albion Road is proposed to be an L-shaped road pattern (to the west) which will be integrated with the Trinity Neighbourhood Plan Review. Final plans will be determined in coordination with the Trinity Neighbourhood land use review. However, since the closure of Upper Mount Albion Road should be coordinated with the implementation of the Trinity Church Arterial Corridor, it may be necessary to provide a temporary cul-de-sac prior to the Trinity Neighbourhood road network construction. The preliminary design for the potential temporary closure involves a 13m radius cul-de-sac, as illustrated on Design Plate 4 in Appendix B.1.

5.1.7 Closure of Pritchard Road

The closure of Pritchard Road was identified in the approved plan for the East Mountain Industrial Business Park. The timing and details of the closure of Pritchard Road will be coordinated with the extension of Anchor Road to Rymal Road, the further review of traffic control on Rymal Road and the Trinity Church Arterial Corridor and the future feasibility study for the installation of bike lanes long Pritchard Road. The preliminary design for the closure involves a 13m radius cul-de-sac, as illustrated on Design Plate 4 in Appendix B.1.
5.1.8 Carpool Lot

As part of the Rymal Road Planning Area Transportation Master Plan, a carpool lot was recommended in the vicinity of the Red Hill Valley Parkway and Lincoln Alexander Expressway interchange as part of the overall transportation strategy. The lot locations would logically be in close proximity to the Trinity Church Arterial Road to provide the greatest access to the expressway system. Planning for a carpool facility will require identification of anticipated demand to allow for determining the size of lot and then suitable parcels. The following is a summary of anticipated demand. The exact location of the lot is beyond the scope of this study as it requires property negotiation and valuation.

Based on a review of the Carpool Lot Strategy Study (March 1998) prepared for the Ministry of Transportation which summarizes the parking demands at carpool lots throughout the GTA and beyond, we have selected the carpool lots on the Highway 400 corridor (King Road to Highway 9) to estimate the future demand at the proposed carpool lot along the Trinity Church Corridor. The MTO Carpool Parking Lot Inventory - February / March 2000 provided surveyed carpool lot parking demand from 2000 for the proxy sites.

The total parking demand at the proxy lots was 217 spaces in 2000. The approximate AM peak hour volume on Highway 400 was 6,700 vph in 2000. Using this ratio of parking demand versus adjacent corridor traffic, the estimated parking demand for the Trinity Church Corridor carpool lot would be 115 spaces in 2021.

The majority of the carpool traffic along the Trinity Church Corridor will be northbound in the AM and southbound in the PM, consistent with the prevailing peak commuter direction. While the carpool lot will attract new trips to the Trinity Church Corridor / Stone Church Road intersection, it will also divert traffic away from the critical southbound left to the non-critical movement in the PM peak.

At this stage of the carpool lot planning, it is anticipated that approximately 115 parking spaces should be accommodated. 115 parking spaces could typically be accommodated in a space of approximately 1,100 m². The carpool lot along the Trinity Church Corridor could be accommodated at any of the following locations:

- Southeast, southwest and northwest corners of the intersection with Stone Church Road
- Southeast, southwest, northeast and northwest corners of the intersection with Highland Road

The carpool lot location could also be combined with a trail head parking lot for the potential Red Hill Valley Open Space Trail.

Access to the carpool lot should be provided from the proposed mid-block collector or Stone Church Road and not from the Trinity Church Arterial Corridor.
5.1.9 Property Requirements

The new arterial road link is recommended to:
- Provide a connection to the ROPA 9 and Heritage Green community traffic from the Parkway system.
- Serve as an extension and transition of the Red Hill Valley Parkway to an arterial road.
- Provide a connection further south as a component of the road network to serve the North Glanbrook Industrial Business Park and to service lands to the south.

Each of these needs reflects a major arterial road role.

A 60 m ROW is recommended for the Trinity Church Arterial Corridor, north of Rymal Road and a minimum 45 m ROW is recommended for the Trinity Church Arterial Corridor, south of Rymal Road. These right-of-way widths were recommended for several reasons:
- To provide for future transportation capacities along the corridor beyond the 2021 time horizon, including potential for additional vehicle lanes, transitway, bus bays, etc.;
- To accommodate the necessary flare for the roundabout;
- To provide for utility services; and
- To provide for stormwater facilities.

These right-of-way requirements are typical for similar high-level arterial corridors in the City, such as Mud Street.

Property requirements identified for this project involve approximately 1 commercial property, 4 residential properties, and Ontario Realty Corporation lands, north of Rymal Road, and approximately 7 residential properties, south of Rymal Road. Formal definition of property requirements will be determined during detailed design.

The approximate property requirements are illustrated in Appendix B.1. The exact property requirements will be determined at detailed design. Overall, more detailed review of property requirements is required in all areas throughout the corridor as part of the detailed design.

5.1.10 Cost Estimate

The preliminary estimated construction cost for the recommended improvements is $6,394,000 (north of Rymal Road) and $2,203,000 (south of Rymal Road), including design fees and administrative costs. The fees do not include property acquisition costs which will be confirmed during detail design. The cost breakdown is included in Appendix D.

5.2 Environmental Effects and Mitigation Measures

This section examines the anticipated environmental effects and mitigating measures for the relevant components of natural, social, economic and cultural environments.
5.2.1 Natural Environment

5.2.1.1 Fisheries and Aquatic Habitat

Watercourses located within the project limits are intermittent and do not directly support fish habitat throughout the year. As a result, potential effects on fish habitat can be fully mitigated through standard road construction practices, erosion and sedimentation control and in-water construction timing restrictions. Increases in quantity of runoff associated with the increased surface imperviousness from the proposed road improvements will not impact existing conditions.

Further details can be found in the Natural Environment report, provided in Appendix D.3 of the ROPA9 Master Plan and Appendix C.1 of this report.

5.2.1.2 Vegetation and Wildlife

Trinity Church Arterial Corridor will require vegetation removals within the new right-of-way. This vegetation has been disturbed previously through human activity and comprises cultural thicket and cultural meadow communities. The higher quality vegetation, including the black walnut woodlot, was avoided through route selection.

The development of Trinity Church Arterial Corridor will result in disturbance to vegetation located adjacent to the right-of-way. Since this vegetation is cultural in origin (i.e. previously disturbed), the effects of disturbance are considered minor.

No plant species of conservation concern or significant vegetation communities will be lost or disturbed by road development.

Within the project limits, the Trinity Church corridor supports wildlife species that are tolerant of urban conditions and human disturbance. Impacts to wildlife associated with this undertaking are therefore considered relatively minor.

Trinity Church Arterial Corridor will be constructed primarily through agricultural lands and cultural vegetation communities. These areas primarily consist of previously modified/disturbed terrestrial wildlife habitat with low habitat structure and diversity. Consequently, road development will result in the loss of approximately 2,340 m² of habitat with limited capability for wildlife.

Numerous bird species located within the project limits are listed under the Migratory Birds Convention Act (MBCA). The MBCA prohibits the killing, capturing, injuring, taking or disturbing of migratory birds (including eggs) or damaging, destroying, removing or disturbing of nests. Migratory insectivorous and non-game birds are protected year-round and migratory game birds are protected from March 10 to September 1. No permits are issued for the destruction of migratory birds or their nests incidental to some other undertaking or activity and project works or activities are not specifically prohibited under
the Act. To meet the requirements of the MBCA, no vegetation removals should occur during
the nesting season. With several exceptions, this includes the period from April 1 to July 31. If
vegetation clearing is required during this period, a nesting survey should be carried out by
a qualified avian biologist prior to construction. If active nests are found, a site-specific
mitigation plan should be prepared in consultation with the Canadian Wildlife Service.

Further details can be found in the Natural Environment report, provided in Appendix D.3 of
the Master Plan and Appendix C.1 of this report.

5.2.1.3 Contaminated Property Screening

No evidence of actual contamination was identified within the study area. However, there is
the potential for environmental contamination to be associated with some of the land uses
(农业) identified. As a result, consideration should be given to conducting a further
investigation during the detailed design stage and in advance of property acquisition.

5.2.1.4 Recommended Mitigation

The following are recommended mitigation measures for the protection of terrestrial and
aquatic within the study corridor, during construction.

Natural Sciences

The effects of habitat removal on wildlife can be mitigated through the following measures:
- Avoid vegetation clearing during wildlife breeding seasons, primarily March 15 to July
  31;
- Disperse, capture and relocate wildlife prior to vegetation clearing; and
- Install a temporary tree protection barrier around trees to be protected during construction
  in accordance with OPSS 565.

Trees on private property that may be affected as a result of the road widening or during
construction will be identified prior to or during detailed design and may require the
development of further strategies for mitigating these impacts.

In addition, in an effort to compensate for trees and other vegetation removed, and to
enhance the aesthetics of the works and reduce any potential visually intrusive effects,
streetscaping will be provided throughout the corridors, as appropriate, in accordance with
the City of Hamilton Street Tree Planting Policy – Planning and Design and as shown on
cross sections in Appendix B.2.

Provide erosion and sediment control during construction.

Any soils that are removed during construction should be tested for contaminants that may
have been used or dumped along the corridor limits. If the soils are contaminated, the City of
Hamilton Contaminated Sites Management Program for Municipal Works measures will be
implemented and will follow appropriate soil management practices including testing and disposing of contaminated soils using licensed haulers and disposal facilities.

To minimize reduced air quality due to dust, apply water and calcium chloride during construction.

**5.2.2 Social, Economic and Cultural Environment**

**5.2.2.1 Land Use and Socio-Economic Impacts**

The design directly affects 6 existing accesses (3 at Highland Road and 3 at Rymal Road). The City will negotiate with the affected properties during the detailed design phase. The design will be an access-controlled arterial corridor, with a flush or raised median throughout the entire corridor. During detailed design, a traffic management plan will be developed to determine how traffic will be accommodated during construction.

The corridor construction may temporarily impact access points to existing institutions and residences while construction is taking place. Timing of construction activities can be coordinated to mitigate many of these impacts. Construction activities should not have significant impacts on regular institution and residents operations throughout the corridor.

**5.2.2.2 Road Construction and Noise**

The Ministry of the Environment (MOE) does not have noise guidelines specifically relating to construction or roadway widening. However, the MOE does have a protocol with the Ministry of Transportation (MTO) relating to Provincial Highway Expansions. The protocol states that the primary objective is to achieve 55 dBA or the preconstruction ambient sound exposure, whichever is higher, at outdoor amenity areas. The MOE/MTO protocol indicates that for sound exposure increases greater than 5 dBA, an investigation into the administrative, economic, and technical feasibility of noise mitigation is required.

Future conditions expected with this project result in a predicted noise level of 68 dBA for existing noise receptors (residential backyards) at Rymal Road and at Highland Road adjacent to the Trinity Church Arterial Corridor. The biggest change over the existing noise levels results in an increase of >5 dBA. According to the MOE/MTO protocol, mitigation is required for increases of 5 dBA or more. Noise mitigation measures (soundwalls, purchasing the land, etc.) will be investigated for these existing occupied properties during detailed design, where appropriate, for existing receptors. Any future development will be responsible for any required mitigation for future receptors.
5.2.2.3 Archaeology, Heritage and Cultural Resources

Archaeology

There is a potential for the identification of precontact and historic archaeological sites in areas depending on the degree of previous land disturbance.

Several new routes options for Trinity Church Arterial Corridor have been proposed east and west of, and coinciding with the current Trinity Church Road right-of-way. The various options connect via a variety of collectors, many of which link to other proposed road extensions. In general, the area is comprised of agricultural lands with scattered historic farmsteads, isolated residential properties, and strips of residential properties. Most of the area is undisturbed by development.

Field review identified potential for archaeological sites over almost all of the study area. In view of the historic potential along the existing road, the option following existing Trinity Church Road is the least preferred alternative due to potential impact to heritage resources. In the area between Highland Road and Rymal Road, most of the area covered by the various route options has been previously subjected to archaeological assessment, and, pending clearance by the MCL, those lands would not require further assessment. Two of the five registered sites in the vicinity of the route options might require further archaeological assessment.

In view of these results, the following recommendations are made:

- With the exception of lands that have been previously assessed and cleared of further heritage concerns by the MCL, a Stage 2 archaeological assessment should be conducted of the preferred route option within the Trinity Church Corridor Extension project area, in accordance with the Ministry of Culture’s Stage 1-3 Archaeological Assessment Technical Guidelines (1993, 2006). This work would be conducted to identify any archaeological remains that may be present;

The above recommendations are subject to Ministry of Culture approval, and it is an offence to alter any archaeological site without Ministry of Culture concurrence. No grading or other activities that may result in the destruction or disturbance of an archaeological site are permitted until notice of Ministry of Culture approval has been received.

- Should deeply buried archaeological remains be found during construction activities, the Heritage Operations Unit of the Ontario Ministry of Culture should be notified immediately.

Further details can be found in the Stage 1 Archaeological Assessment report, provided in Appendix C.2.
Cultural Heritage

No heritage or cultural features are expected to be impacted as a result of the proposed road alignment. Further details on the study area build heritage and cultural landscape can be found in the cultural heritage assessment report, provided in Appendix D.2 of the Master Plan.

5.2.3 Comments from Provincial Agencies

Ontario Realty Corporation

Ontario Realty Corporation (ORC) provided comments through the public process on July 17, 2006. Their comments related to the Trinity Church Arterial Corridor are as follows: “

1. It is crucial that the road design incorporate the following principles:
   ▪ Will not create parcel configurations that limit the marketability, desirability, and value of these lands (rectangular configurations are preferred and attention to width of land between the future road and hydro/pipeline corridor needs to be considered);
   ▪ Consider appropriate design speeds that would permit lots to front and have direct access to the ROW;
   ▪ Provide for a mid-block intersection (between Highland Rd. W. and Rymal Rd., e.g. 300m south of Highland Rd.W.), to permit connection to an east-west road between Pritchard Road and Upper Mount Albion Road.

2. ORC should be fully compensated for the land taking required for this road as it will serve as a City-wide benefit. This compensation may not necessarily be restricted to the land required for the right-of-way, but may also include compensation for the loss of land value due to the creation of irregular/unusable land parcel shapes between the road and hydro/pipeline corridor.”

In response to the ORC comments, the proposed design for the Trinity Church Arterial Corridor was chosen on a variety of criteria, which included “Compliance with the NGIBM Master Plan and East Mountain Industrial Business Park / Land Use Coordination” to consider the creation of odd-shaped parcels. The preferred alternative (Option 4) was the most desirable alignment for this criterion. Although the recommended design will have access management, the recommended design accommodates an intersection with a midblock collector road approximately 250 m south of Highland Road, which will provide access to the East Mountain Industrial Business Park lands. A copy of the ORC letter is provided in Appendix A.1.

Ministry of Natural Resources:

The Ministry of Natural Resources provided comments through the public process on October 27, 2006. Their comments related to the Eramosa Karst ANSI. The following comments were provided:
“Thank you for providing notice regarding initiation of Phases 3 and 4 of the Municipal Class Environmental Assessment process for the schedule ‘C’ projects identified through the Rymal Road Planning Area Master Plan. The Ministry has reviewed information available from the City’s website and mapping provided by iTRANS Consulting Inc. and offers the following comments.

Sections of the provincially significant Eramosa Karst ANSI are located within the Rymal Road Planning Area. Some of the projects proposed have the potential to impact the ANSI. The preferred alternative for a new collector road for the Trinity neighbourhood is proposed to pass through the ANSI Feeder Area and Developed Area. The widening of Rymal Road will occur within the ANSI Feeder Area. The Ministry notes that the mapping provided to show the Trinity neighbourhood collector alternatives does not show the full extent of creeks within the ANSI Feeder Area that would potentially be affected. The mapping should be carefully reviewed.

The *Earth Science Inventory and Evaluation of the Eramosa Karst ANSI* (April 2003) provides detailed information about the significance of the ANSI and includes recommendations for protecting its values. As the report notes, the Feeder Area contains all of the watersheds for streams that sink along the south edge of the Core Area. These streams are believed to contribute flow to the karst system in the Core and Developed Areas, and thus play a critical role in maintaining the provincially significant karst features. The report recommends, that the Feeder Area be afforded a level of protection to ensure that:

1) the flows of the creeks into the Core Area are substantially maintained (i.e. stream discharge including low flow and high flow characteristics, and discharge response to runoff events),
2) water quality is improved (i.e. primarily a reduction in sediment load, since the sediment load is currently quite high as a result of agriculture), and
3) protective measures are employed to reduce the risk of contamination of surface streams by substances that would significantly impact the karst.

It is also recommended that prior to any development in the Feeder Area, development plans be reviewed to ensure that these objectives will be met. As well as expertise in civil engineering, reviewers should have expertise in environmental hydrology and geomorphology. A sound knowledge of karst hydrology and geomorphology would be an asset. There are significant features within the Developed Area, and the report provides recommendations for this area that should also be reviewed.

It is the Ministry’s expectation that the recommendations of this report will be respected, and that the City will consult with reviewers with suitable expertise in the evaluation and selection of design alternatives. This information and assessment should be included in the Environmental Study Report.

Please continue to circulate new information as it becomes available. You may contact the undersigned if you have questions or clarification is required.”
In response to the MNR comments, the proposed design for the Trinity Church Arterial Corridor will not be directly impacting the Eramosa Karst ANSI. Potential impacts to sinkholes or other Karst features in the Karst feeder area will need to be reviewed during detail design. A copy of the MNR letter is provided in Appendix A.1.

### 5.2.4 Summary of Identified Concerns and Mitigation Measures

A summary of the potential impacts to the natural, social/economic and cultural environments together with recommended mitigation measures is provided in Table 5-1.

#### Table 5-1: Anticipated Impacts and Proposed Mitigation Measures

<table>
<thead>
<tr>
<th>Factor</th>
<th>Anticipated Impact</th>
<th>Proposed Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Environment:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetation / Trees</td>
<td>Removal of existing trees, and other vegetation, including trees which will be removed or potentially impacted along the Trinity Church Corridor (including shelter belts and two gray dogwood cultural thickets).</td>
<td>Tree removal, planting and protection during construction will be as per City of Hamilton Public Tree Removal Policy, and the City’s Tree Preservation and Protective Measures for Trees Affected by Construction Policy. Trees on private property that may be affected as a result of the road widening or during construction will be identified prior to or during detailed design and may require the development of further strategies for mitigating these impacts. In addition, in an effort to compensate for trees and other vegetation removed, and to enhance the aesthetics of the works and reduce any potential visually intrusive effects, streetscaping will be provided throughout the corridor, as appropriate, in accordance with the City of Hamilton Street Tree Planting Policy – Planning and Design. The work zone will be delineated using construction fencing/tree protection barrier. The application of road salt will be managed to the extent possible. Disturbed areas will be restored with native seed mix. Native, non-invasive, complementary vegetation to compensate for vegetation removals will be planted.</td>
</tr>
<tr>
<td>Wildlife</td>
<td>Impact on wildlife habitat</td>
<td>Within the project limits, the Trinity Church corridor supports wildlife species that are tolerant of urban conditions and human disturbance. Impacts to wildlife associated with this undertaking are therefore considered relatively minor. Vegetation clearing will be avoided during wildlife breeding seasons, primarily March 15 to July 31 to further minimize impacts. Wildlife will be dispersed, captured and relocated prior to vegetation clearing.</td>
</tr>
<tr>
<td>Factor</td>
<td>Anticipated Impact</td>
<td>Proposed Mitigation</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>--------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Fisheries and Aquatic Habitat</td>
<td>■ Impact on fisheries or aquatic habitat</td>
<td>■ Since the watercourse crossings along the Trinity Church Corridor are not well defined channels and no aquatic habit has been identified in the crossings, the proposed widening impacts are considered relatively minor.</td>
</tr>
<tr>
<td>Surface Water</td>
<td>■ Increase in the existing pavement area will result in increase in quantity of runoff</td>
<td>■ Increases in quantity of runoff will not impact existing conditions.</td>
</tr>
<tr>
<td></td>
<td>■ Potential negative impact to receiving watercourses</td>
<td>■ Water quality treatment will meet minimum Ministry of the Environment requirements.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>■ Provide erosion and sediment control during construction.</td>
</tr>
<tr>
<td>Air Quality</td>
<td>■ Potential for impacts from dust during construction.</td>
<td>■ To minimize reduced air quality due to dust, apply water and calcium chloride during construction.</td>
</tr>
<tr>
<td>Soil Removal, and Contaminants</td>
<td>■ Potential for removal of contaminated soils</td>
<td>■ Any soils that are removed during construction should be tested for contaminants that may have been used or dumped along the corridor limits. If the soils are contaminated, the City of Hamilton Contaminated Sites Management Program for Municipal Works measures will be implemented and will follow appropriate soil management practices including testing and disposing of contaminated soils using licensed haulers and disposal facilities.</td>
</tr>
<tr>
<td><strong>Social Environment:</strong></td>
<td></td>
<td>■ Maintain access to individual driveways during construction.</td>
</tr>
<tr>
<td>Economic Impact to Businesses</td>
<td>■ Economic impact to businesses</td>
<td>■ Full movement to existing properties will not be restricted after construction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>■ Restriction on work hours in the corridors.</td>
</tr>
<tr>
<td>Noise Levels</td>
<td>■ Increase in existing noise levels.</td>
<td>■ Future conditions expected with this project result in a predicted noise level of 68 dBA. The biggest change over the existing noise levels results in an increase of &gt;5 dBA. According to the MOE/MTO protocol, mitigation is required for increases of 5 dBA or more. Noise mitigation measures (soundwalls, purchasing the land, etc.) will be investigated during detailed design, where appropriate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>■ Construction activities are to comply with the requirements of the municipal noise by-law 03-020. Any initial complaint from the public will require verification that the general noise control measures agreed to are in effect, any noise concerns will be investigated, and the contractor warned of any problems.</td>
</tr>
<tr>
<td>Factor</td>
<td>Anticipated Impact</td>
<td>Proposed Mitigation</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Safety concerns        | • Safety for pedestrian, cyclists, motorists           | • To maintain and encourage pedestrian movements, sidewalks will be constructed on both sides of the Trinity Church Corridor through the urbanized section (north of Rymal Road).  
• Traffic signals will be timed to provide adequate crossing time for pedestrians at the intersection with Stone Church Road and other locations if signals are identified as the preferred traffic control.  
• Splitter islands will be provided to shorten crossing distances for roundabouts at the intersection with Rymal Road and other locations if roundabouts are identified as the preferred traffic control.  
• Cyclists will be accommodated with bike lanes along Trinity Church Corridor. The preferred location of the bike lanes will be determined during the functional design of the installation of bike lanes along Pritchard Road.  
• A median will be provided throughout the corridor to provide access management. Vehicles will access the Trinity Church Corridor from the intersections with other road connections. |
| Property Requirements  | • Requirement for additional property                  | • Property will be required from approximately 1 business, 4 dwellings, and Ontario Realty Corporation lands. Formal definition of property requirements will be determined during detailed design. |
| Cultural               | • Discovery of archaeological / human remains not anticipated | • Immediately contact appropriate Ministries, if any deeply buried deposits are found.                                                                                                                                 |
| Streetscaping          | • Reduced aesthetics                                   | • To address concerns over the aesthetics of the roadway, streetscaping is to be provided along both sides of Trinity Church Corridor, where feasible. Streetscaping details will be confirmed during detailed design. Preliminary streetscaping plans include planting trees along the corridors. |
| Utility                | • Relocation of existing utilities                     | • Existing utilities will need to be relocated. Formal definition of impacts on utilities, specifically Enbridge Gas, Union Gas, Hamilton Hydro, Bell Canada, Mountain Cable, Cogego Cable, Fiberwired and Source Cable will be determined during detailed design. |
| Construction Detours   | • Inconvenience during construction                    | • Impacts will be temporary in nature. The City will attempt to mitigate impacts as much as possible during detailed design and construction, through construction staging plans and traffic management plans. |
| Illumination           | • Need for additional illumination with a wider road    | • Illumination to be provided on Trinity Church Corridor, as appropriate.                                                                                                                                               |
6. SUMMARY

The Trinity Church Arterial Corridor Environmental Assessment Study Area is bounded by Upper Mount Albion to the east, Stone Church Road-Paramount Drive to the north, Glover Road to the west, and Dickenson Road to the south.

This report documents the Phases 3 and 4 of the Class EA process for the Trinity Church Arterial Corridor study, including the identification and evaluation of design alternatives and the selection of preferred design. This report should be read in conjunction with the Rymal Road Planning Area (ROPA 9) Master Plan (June 2006), which documents Phases 1 and 2 of the Class EA process. The report should also be read in conjunction with the North Glanbrook Industrial Business Park Master Plan addressed the Phase 1 and 2 requirements for the Trinity Church Arterial Corridor, south of Rymal Road.

The ROPA 9 Master Plan identified that a north-south link from the Red Hill Valley Parkway to south of Rymal Road is crucial to the broader road network within the City, and would also serve the local community. Providing adequate capacity in this corridor is critical to planning for the economic growth and well-being of the City. The former Region of Hamilton-Wentworth Official Plan recognizes this need, and has highlighted a future extension of Trinity Church Road to the Red Hill Valley Parkway. The ROPA 9 Master Plan also identified the need for a north-south link from the Red Hill Valley Parkway to south of Rymal Road as a longer term solution to address the traffic operations issues within the Trinity Neighbourhood.

The NGIBP Transportation Master Plan identified the need for a two lane arterial road from Rymal Road to the future Dartnall Road Extension in the vicinity of Trinity Church Road with the protection for four lanes for the arterial road in the longer term.

The technically preferred Design Alternative for the Trinity Church Arterial Corridor includes:
- A new 4 lane (2 through lanes in each direction) arterial corridor from the Red Hill Valley Parkway-Stone Church Road intersection to south of Rymal Road.
- Provision of traffic signals at the intersection with Stone Church Road.
- Provision of a roundabout at the intersections with Highland Road, Midblock Collector, Rymal Road and Twenty Road. The roundabout intersections are subject to further assessment during detailed design. Should the roundabouts be determined unfeasible during detailed design, signalization will be implemented, where warranted.
- Provision of an urban cross-section for the Trinity Church Arterial Corridor north of Rymal Road and a rural cross-section south of Rymal Road.

The timing for implementation of the Trinity Church Arterial Corridor segment between Stone Church Road and Rymal Road was discussed in the Rymal Road Planning Area Master Plan, which identified that additional north-south capacity (equivalent to 2 lanes per direction) is needed in the Trinity Church Arterial Corridor by the 2011 time horizon and should be implemented as soon as possible, given design and funding constraints.
The North Glanbrook Industrial Business Park Master Plan identified a need for a longer-term extension of the Trinity Church Arterial Corridor to continue south of Rymal Road to service the Business Park and to allow flexibility for a potential future connection to the airport.

The preliminary design of the technically preferred Design Alternative is outlined in Section 5.1 and Appendix B. The environmental impacts of the preferred Design Alternative are discussed in Section 5.2. To minimize the environmental impacts of the preferred Design Alternative, many mitigation measures will be implemented. These mitigation measures are summarized in Section 5.2.4 and include:

- Tree removal, planting and protection during construction will be as per City of Hamilton Public Tree Removal Policy, and the City’s Tree Preservation and Protective Measures for Trees Affected by Construction Policy.
- Trees on private property that may be affected as a result of the road widening or during construction will be identified prior to or during detailed design and may require the development of further strategies for mitigating these impacts.
- In addition, in an effort to compensate for trees and other vegetation removed, and to enhance the aesthetics of the works and reduce any potential visually intrusive effects, streetscaping will be provided throughout the corridor, as appropriate, in accordance with the City of Hamilton Street Tree Planting Policy and Appendix B.
- Water quality treatment will meet minimum Ministry of the Environment requirements.
- Provide erosion and sediment control during construction.
- To minimize reduced air quality due to dust, apply water and calcium chloride during construction.
- Any soils that are removed during construction should be tested for contaminants that may have been used or dumped along the corridor limits. If the soils are contaminated, the City of Hamilton Contaminated Sites Management Program for Municipal Works measures will be implemented and will follow appropriate soil management practices including testing and disposing of contaminated soils using licensed haulers and disposal facilities.
- Maintain access to individual driveways during construction.
- Full movement to existing properties will not be restricted after construction.
- Restriction on work hours in the corridors.
- Future conditions expected with this project result in a predicted noise level of 68 dBA. The biggest change over the existing noise levels results in an increase of >5 dBA. According to the MOE/MTO protocol, mitigation is required for increases of 5 dBA or more. Noise mitigation measures (soundwalls, purchasing the land, etc.) will be investigated during detailed design, where appropriate, for existing receptors.
- Construction activities are to comply with the requirements of the municipal noise by-law 03-020. Any initial complaint from the public will require verification that the general noise control measures agreed to are in effect, any noise concerns will be investigated, and the contractor warned of any problems.
- Immediately contact appropriate Ministries, if any deeply buried deposits are found.
- Existing utilities will need to be relocated. Formal definition of impacts on utilities, specifically Enbridge Gas, Union Gas, Hamilton Hydro, Bell Canada, Mountain Cable, Cogego Cable, Fiberwired, Source Cable, TransCanada and Trans-Northern Pipelines will be determined during detailed design.
- Impacts will be temporary in nature. The City will attempt to mitigate impacts as much as possible during detailed design and construction, through construction staging plans and traffic management plans.
- Illumination to be provided on Trinity Church Corridor, as appropriate.
June 28, 2006

Christine Lee-Morrison, MCIP, RPP,
Senior Project Manager
City of Hamilton
320 – 77 James Street North
Hamilton, ON L8R 2K3

Dear Ms. Lee-Morrison:

Re: Rymal Road Planning Area ("ROPA 9" Lands) Master Plan –
Class Environmental Assessment

Thank you for your letter of June 15, related to the above.

As you may be aware, the Canadian Environmental Assessment
Act (the Act) normally applies to federal authorities when they contemplate some
action in relation to a project, as defined in the Act, which would enable it to
proceed in whole or in part. Under subsection 5(1) of the Act, a federal
environmental assessment (EA) may be required when, in respect of a project, a
federal authority:

(a) is the proponent of a project;
(b) provides financial assistance to the proponent;
(c) makes federal lands available for the project; or
(d) issues a permit or licence, or other form of approval pursuant to a statutory or
regulatory provision referred to in the Law List Regulations.

In the case of projects that are subject to the Ontario Environmental
Assessment Act, if there is uncertainty as to whether the Canadian Environmental
Assessment Act may also apply, the Agency can help proponents answer this
question. For projects that are subject to the Canadian Environmental
Assessment Act, the Agency will act as the federal environmental assessment
coordinator and facilitate the involvement of the federal authorities in a co-
ordinated assessment aimed at meeting all agencies' needs simultaneously.
In order for the Agency to undertake either of these roles, it must have a project description that can be distributed to various federal authorities to determine their interest in the project. It is recognized that at the early stages of the planning process, there may not be much detailed information to provide. However, proponents should try to provide some information on:

- the nature of the project and its location;
- federal issues relevant to the project, such as fisheries habitat, navigable waters, migratory birds, etc.
- whether federal funding is being contemplated or federal lands are required.

To better assist proponents, the Agency has developed an Operational Policy Statement, which provides guidance in preparing project descriptions. This is available on the Agency's website at: http://www.ceaaceee.gc.ca/013/0002/ops_ppd_e.htm

If your purpose, in sending us notification of your project is to identify any federal interests, please be aware that simple notification will not be sufficient. A project description will be required. If you have any questions regarding this matter, please contact the undersigned at 416-952-0832.

Sincerely,

Darla Cameron
Senior Program Officer
Canadian Environmental Assessment Agency, Ontario Region

DC/mct

c.c: Liza Sheppard, iTRANS Consulting Inc.
Cyndi Rottenberg-Walker, Urban Strategies
Thanks Mike, We will continue to circulate you on the project and information becomes available.

Christine Lee-Morrison, MCIP, RPP
Senior Project Manager, Environmental Planning
Capital Planning and Implementation
Public Works Department
City of Hamilton
320-77 James St. N.
Hamilton, Ontario, L8R 2K3
tel: 905-546-2424 extension 6390
fax: 905-546-4435
cleemorr@hamilton.ca

----Original Message-----
From: Stone, Mike (MNR) [mailto:mike.stone@mnr.gov.on.ca]
Sent: Friday, June 30, 2006 2:47 PM
To: Lee-Morrison, Christine
Cc: nbaudais@itransconsulting.com
Subject: Trinity Church Corridor Class EA Study

Dear Ms. Lee-Morrison,

Thank you for notifying this office regarding the commencement of the above noted. The Ministry does not have any comments or significant concerns at this time but would appreciate the opportunity to review new information as it becomes available. Thank you.

Kind Regards,

Mike Stone

Mike Stone
District Planner
Ministry of Natural Resources
Guelph District
July 17, 2006

Re: ORC Comments on the ROPA 9 Master Plan Class EA Phases 1 and 2

Dear Ms. Lee-Morrison,

We are writing with regard to the City's ROPA 9 Master Plan Class EA (Phases 1 and 2).

As you are aware, the Ministry of Public Infrastructure Renewal (PIR) is the owner of provincial lands in your study area. ORC is agent to PIR and is the strategic manager of the provincial government's real property, with a mandate of maintaining and optimizing value of the portfolio, while ensuring real estate decisions reflect public policy objectives. ORC has been involved in the study process since commencement and previously provided comments through a letter dated August 29, 2005 (attached). We appreciate the efforts of City staff and consultants to meet with us to discuss this project.

ORC's specific interests in the ROPA 9 Master Plan relate to the provincial land holdings that are impacted by: a) the proposed Trinity-Church road corridor; b) the proposed Trinity Neighbourhood collector road. ORC requests that the City respond with written confirmation that they will incorporate the following comments, as documented EA commitments in the EA project file (and subsequent ESRs), when moving forward to Phase 3 and 4 work.

Comments: Proposed Trinity-Church Road Corridor

1. As per the material provided at the June 26, 2006 PIC, it is our understanding that Options 4, 5, and 6 will be carried forward for further investigation. It is crucial that the road design incorporate the following principles:

   a. Will not create parcel configurations that limit the marketability, desirability, and value of these lands (rectangular configurations are preferred and attention to width of land between the future road and hydro/pipeline corridor needs to be considered);

   b. Consider appropriate design speeds that would permit lots to front and have direct access to the ROW;

   c. Provide for a mid-block intersection (between Highland Rd. W. and Rymal Rd., e.g. 300m south of Highland Rd. W.), to permit connection to an east-west road between Pritchard Road and Upper Mount Albion Road.
2. ORC should be fully compensated for the land taking required for this road as it will serve as a City-wide benefit. This compensation may not necessarily be restricted to the land required for the right-of-way, but may also include compensation for the loss of land value due to the creation of irregular/unused land parcel shapes between the road and hydro/pipeline corridor.

Comments - Proposed Trinity Neighbourhood Collector Road

1. As per discussions we have had with yourself and staff from iTRANS, it is our understanding that Options 1, 1A, 3 and 4 (shown on iTRANS mapping entitled “Collector Road Potential Alignments,” Feb. 22, 2006) will be carried forward for further investigation. It is crucial that the road design incorporate the following principles:

   a. Focus on providing a double-loaded ROW with a maximum width of approximately 26m (ideally the width of the proposed ROW would be narrower than 26 metres);

   b. Make every effort to minimize the loss of potentially developable lands. It should be noted that based on our preliminary calculations, on the north end of the property (i.e. north of the Bell easement), there would be a loss of approximately 62m of saleable frontage when using a 26m ROW (collector) as opposed to a 20m ROW (local road); also, the net developable loss over the northern part of the property would amount to 0.55 Ha when using a 26m ROW (collector) as opposed to a 20m ROW (local road).

2. ORC should not bear the full burden of any ‘oversizing’ of the proposed road. Thus, all additional costs resulting from ‘oversizing’ of the proposed road, to accommodate growth in the surrounding area and for the benefit of other property owners and the public, should result in a fair distribution of burdens and be covered under future development charges.

3. Through our discussions with City staff, we feel that the detailed design of the proposed collector would ideally be done concurrently with a formal plan of subdivision application, rather than solely through an EA study. ORC is considering submitting a subdivision application. In the event that ORC is able to submit an application, we would request the following:

   a. Commitment for a timely review of the application, with the goal of granting draft plan approval within 1 year (assuming no OMB appeals, EA Part II requests, etc.).

Thank you in advance for considering the above comments and we look forward to your written response. ORC has survey, environmental, and archaeological work that has been completed, or is underway, on the subject lands and that can be made available to the City to help inform the Phase 3 and 4 study components. Finally, we look forward to a continued positive working relationship as you move forward with this work.

Sincerely,

John MacKenzie, MCIP, RPP
GM, Planning
Tel. 416-212-6456
E-mail. john.mackenzie@orc.gov.on.ca

Anil Wijesooriya
Land Use Planner
Tel. 416-212-6183
E-mail. anil.wijesooriya@orc.gov.on.ca
FYI

Christine Lee-Morrison, MCIP, RPP
Senior Project Manager, Environmental Planning
Capital Planning and Implementation
Public Works Department
City of Hamilton
320-77 James St. N.
Hamilton, Ontario, L8R 2K3
tel: 905-546-2424 extension 6390
dax: 905-546-4435
cleemorr@hamilton.ca

-----Original Message-----
From: Elizabeth.Duval@mci.gov.on.ca [mailto:Elizabeth.Duval@mci.gov.on.ca]
Sent: Wednesday, July 12, 2006 12:12 PM
To: Lee-Morrison, Christine
Cc: Cheryl.Findlay@mci.gov.on.ca
Subject: Trinity Church Corridor Environmental Assessment

July 12, 2006

Ms. Christine Lee-Morrison, MCIP, RPP
Senior Project Manager
Strategic and Environmental Planning
City of Hamilton
320-77 James Street North
Hamilton, ON L8R 2K3

Dear Ms. Lee-Morrison:

Re: Trinity Church Corridor
"Schedule C" Class Environmental Assessment

Thank you for your letter of June 13, 2006, regarding the above noted project. On behalf of my Manager, Tom Chrzan, I have reviewed the information and noted the details. I have no comments to make at this time.

However, the ministry may wish to provide comments on the impact of the Study/Assessment on heritage resources. For this review and comment, please contact:

1/24/2007
Mr. Michael Johnson, Manager
Heritage and Libraries Branch
Ministry of Culture
4th Floor, 400 University Avenue
Toronto ON M7A 2R9

Thank you again for informing us of this project.

Sincerely,

Liz Duval
Consultant
Ministry of Citizenship and Immigration
Ministry of Culture
Ministry of Tourism
Sport and Recreation Branch
119 King Street West, 14th Floor
Hamilton, ON  L8P 4Y7

Phone: 905-521-7346
Toll Free: 1-877-998-9926
Fax: 905-521-7398
E-Mail: elizabeth.duval@mci.gov.on.ca
August 29, 2005

Margaret Fazio  
Project Manager  
City of Hamilton  
77 James Street North, Suite 320  
Hamilton, Ontario  L8R 2K3

RE: ORC Initial Comments on Rymal Road Planning Area (ROPA 9 Lands) Master Plan - Class EA

Thank you for circulating Ontario Realty Corporation (ORC) on your notice related to your environmental assessment undertaking.

ORC is the strategic manager of the government’s real property with a mandate of maintaining and optimizing value of the portfolio, while ensuring real estate decisions reflect public policy objectives of the government.

We are writing to provide you with the following initial comments for consideration and inclusion in your EA project file.

Potential Negative Impacts to ORC Tenants and Lands

Our preliminary review of your notice and supporting information indicates that ORC managed lands are within the vicinity of your study area. As a result, your proposal may have the potential to impact these lands and/or the activities of tenants present on ORC managed lands. Attached please see a map that identifies ORC managed lands within your study area to assist you in identifying and avoiding potential impacts.

Negative environmental impacts associated with the project design and construction, such as the potential for dewatering, dust, noise vibration impacts, and impacts to natural heritage features/habitat and functions, should be avoided and/or appropriately mitigated in accordance with applicable regulations best practices and MNR and MOE standards. Avoidance and mitigation options that characterize baseline conditions and quantify the potential impacts should be present as part of the EA project file. Details of appropriate mitigation, contingency plans and triggers for implementing contingency plans should also be present.

Negative impacts to land holdings, such as taking of developable parcels of ORC managed land or fragmentation of utility or transportation corridors, should be avoided. If the potential for such impacts is present as part of this undertaking, you should contact the undersigned to discuss these issues at the earliest possible stage of your study.

If takings are suggested as part of any alternative these should be appropriately mapped and quantified within EA report documentation. In addition, details of appropriate mitigation and or next steps related to compensation for any required takings should be present. ORC requests
CC: Regional Office, ORC
GM Environment and Heritage, ORC
GM Planning, ORC

Reference Map – Provincial Landholdings in Study Area
Thank you, we have removed your agency from this project mailing list.

Christine Lee-Morrison, MCIP, RPP  
Senior Project Manager, Environmental Planning  
Capital Planning and Implementation  
Public Works Department  
City of Hamilton  
320-77 James St. N.  
Hamilton, Ontario, L8R 2K3  
tel: 905-546-2424 extension 6390  
fax: 905-546-4435  
cleemorr@hamilton.ca

-----Original Message-----
From: Lee-Morrison, Christine [cleemorr@hamilton.ca]
Sent: Wednesday, October 18, 2006 3:38 PM
To: Nathalie Baudais
Cc: Nathalie Baudais
Subject: RE: Rymal Road Planning Area Master Plan EA Study - Trinity Church Corridor

Christine Lee-Morrison
We are in receipt of your letter dated October 3, 2006 regarding the Rymal Road Planning Area Master Plan - Phase 3 and 4 Class Environmental Assessment Study (Trinity Neighbourhood and Trinity Church Corridor). As per our letter sent to your attention on June 22, 2006, CN has no comments or concerns regarding this project. Please remove CN Rail from your mailing list.

Thank you
October 27, 2006

Christine Lee-Morrison
City of Hamilton
Public Works Department
320-77 James St. N.
Hamilton, ON L8R 2K3

Dear Ms. Morrison:

RE: Notice of Study Commencement & PIC – Phase 3 and 4 Class EA Study
Rymal Road Planning Area ("ROPA 9" Lands) Master Plan & Trinity
Neighbourhood Collector

Thank you for providing notice regarding initiation of Phases 3 and 4 of the Municipal Class Environmental Assessment process for the schedule 'C' projects identified through the Rymal Road Planning Area Master Plan. The Ministry has reviewed information available from the City’s website and mapping provided by iTrans Consulting Inc. and offers the following comments.

Sections of the provincially significant Eramosa Karst ANSI are located within the Rymal Road Planning Area. Some of the projects proposed have the potential to impact the ANSI. The preferred alternative for a new collector road for the Trinity neighbourhood is proposed to pass through the ANSI Feeder Area and Developed Area. The widening of Rymal Road will occur within the ANSI Feeder Area. The Ministry notes that the mapping provided to show the Trinity neighbourhood collector alternatives does not show the full extent of creeks within the ANSI Feeder Area that would potentially be affected. The mapping should be carefully reviewed.

The Earth Science Inventory and Evaluation of the Eramosa Karst ANSI (April 2003) provides detailed information about the significance of the ANSI and includes recommendations for protecting its values. As the report notes, the Feeder Area contains all of the watersheds for streams that sink along the south edge of the Core Area. These streams are believed to contribute flow to the karst system in the Core and Developed Areas, and thus play a critical role in maintaining the provincially significant karst features. The report recommends, that the Feeder Area be afforded a level of protection to ensure that:

1) the flows of the creeks into the Core Area are substantially maintained (i.e. stream discharge including low flow and high flow characteristics, and discharge response to runoff events),
2) water quality is improved (i.e. primarily a reduction in sediment load, since the sediment load is currently quite high as a result of agriculture), and
3) protective measures are employed to reduce the risk of contamination of surface streams by substances that would significantly impact the karst.

It is also recommended that prior to any development in the Feeder Area, development plans be reviewed to ensure that these objectives will be met. As well as expertise in civil engineering, reviewers should have expertise in environmental hydrology and geomorphology. A sound knowledge
of karst hydrology and geomorphology would be an asset. There are significant features within the Developed Area, and the report provides recommendations for this area that should also be reviewed.

It is the Ministry's expectation that the recommendations of this report will be respected, and that the City will consult with reviewers with suitable expertise in the evaluation and selection of design alternatives. This information and assessment should be included in the Environmental Study Report.

Please continue to circulate new information as it becomes available. You may contact the undersigned if you have questions or clarification is required.

Sincerely,

Original signed by

Mike Stone
District Planner

Cc: Joad Durst, MNR
Donald Kirk, MNR
Katherine Menyes, Hamilton Conservation Authority
From: Liza Sheppard  
Sent: Monday, October 30, 2006 2:18 PM  
To: Nathalie Baudais  
Subject: FW: Rymal Road Planning Area Master Plan - Phase 3 & 4 Class EA Study  
Attachments: hca aug06 report.pdf

Fyi.....

From: Lee-Morrison, Christine [mailto:cleemorr@hamilton.ca]  
Sent: Monday, October 30, 2006 1:41 PM  
To: [Redacted]  
Cc: [Redacted]  
Subject: RE: Rymal Road Planning Area Master Plan - Phase 3 & 4 Class EA Study

Dear [Redacted]

Thank you for MNR's submission regarding this project. As you may know, the City has been working closely with the Hamilton CA in the development and evaluation of alternatives for the Trinity Neighbourhood Collector. The HCA has provided detailed advice to the City with respect to ensuring the recommendations within the April 2003 report are respected. Please find attached, for your information, a letter dated September 6, 2006 from the HCA to the City including a report prepared by Marcus J. Buck Karst Solutions, dated August 31, 2006.

The City will continue to work with the HCA to determine the most appropriate timing and approach to implement the additional studies as outlined within the August 31, 2006.

We will continue to keep you informed and circulated all information to you as it becomes available. Please call me if you have any questions.

Sincerely,

Christine Lee-Morrison, MCIP, RPP  
Senior Project Manager, Environmental Planning  
Capital Planning and Implementation  
Public Works Department  
City of Hamilton  
320-77 James St. N.  
Hamilton, Ontario, L8R 2K3  
tel: 905-546-2424 extension 6390  
fax: 905-546-4435  
cleemorr@hamilton.ca

-----Original Message-----
From: [Redacted]  
Sent: Friday, October 27, 2006 10:41 AM  
To: Lee-Morrison, Christine  
Cc: [Redacted]  
Subject: Rymal Road Planning Area Master Plan - Phase 3 & 4 Class EA Study

Hello Christine. Please find attached comments from the Ministry regarding initiation of Phases 3 & 4 of the Municipal Class EA process for schedule 'C' projects under the Rymal Road Planning Area Master Plan. The original letter will follow in the mail.

10/31/2006
Ms. Lee-Morrison,

We have reviewed the Rymal Road Planning Area proposed Master Plan Phase 3 & 4 Class EA study, and we have no comments to offer as the study area is well outside of Ministry of Transportation's permit control area and this will have no impacts on the provincial highway system. Therefore, we will not require any further circulation of this study to MTO.

If you have any questions, please feel free to contact me.

 Regards,

Greg Roszler
Project Manager
Corridor Management Section
Ministry of Transportation
7th Floor, Building "D"
1201 Wilson Avenue
Downview, Ontario, M3M 1J8
Tel. (416) 235-5124
Fax. (416) 235-4267
E-mail: greg.roszler@ontario.ca
November 10, 2006

City of Hamilton
Planning and Economic Development Department
71 Main St W
Hamilton, Ontario
L8P 4Y5

File# ROPA 9 Lands - Rymal Road Planning Area

Attention: Christine Lee-Morrison, MCIP, RPP, Senior Project Manager

In response to your correspondence(s) dated September 28, 2006, please be advised that our Engineering Design Department have reviewed the information concerning the above noted Consent Application and our comments are as follows:

- Relocation, modification, or removal of any existing hydro facilities shall be at the owner's expense. Please contact Horizon Utilities to facilitate this.

- Since it is the city of Hamilton who are implementing the Master Plan they are the owners in this instance.

We would also like to stipulate the following:

- Do not excavate within two metres of hydro poles and anchors.

- Excavation within one metre of underground hydro plant is not permitted unless approval is granted by a Horizon Utilities representative and is present to provide direct supervision. Cost associated with this task shall be at the owner's expense.

- Horizon Utilities must be contacted if the removal, isolation or relocation of existing plant is required, all cost associated with this work will be at the owners expense.

- CALL BEFORE YOU DIG, arrange for underground hydro cable locate(s) before beginning construction by contacting Ontario One Call @ 1-800-400-2255.
Horizon Utilities Corporation

- Clearances from Overhead and Underground existing electrical distribution system must be maintained in according to:
  - Ontario Building Code (1997) Section 3.1 (3.1.18.1)
  - Electrical Safety Code Rule 75-312
  - Occupational Health and Safety Act (OH&SA) - Construction Projects (Electrical Hazards)
  - CAN/CSA-C22.3 No. 1-01, Overhead System
  - C22.3 No. 7-94 Underground Systems

We trust that you will find this information satisfactory and that the information contained within will be provided to the owner of this project. Should you have any questions regarding this response, please contact Michael Miller at 905-522-6611 ext 2319 in our Engineering Design Department.

Sincerely,

Nick DeStefano
Engineering Design Supervisor
NOTICE OF PUBLIC INFORMATION CENTRE

Trinity Church Corridor
Class Environmental Assessment

THE STUDY
The City of Hamilton has initiated the Trinity Church Corridor Class Environmental Assessment (EA) process to identify and evaluate alternative road alignments and design concepts for a new road link from the Stone Church Road / Red Hill Valley Parkway ramps to south of Rymal Road. The Study Area is shown below.

THE PROCESS
This project is being carried out as a Schedule C project under the guidelines of the Municipal Engineers Association Municipal Class Environmental Assessment (June 2000). The Phase 1 and 2 requirements for the project were fulfilled under the Rymal Road Planning Area Master Plan (ROPA 9) Class Environmental Assessment and the North Glanbrook Industrial Business Park Transportation Master Plan. The Phase 1 and 2 requirements identify the needs and opportunities; identify preliminary alternative solutions to address the servicing issues; conduct an inventory of the natural, social, and economic environments; evaluate the alternatives; and identify a preferred alternative. Public Information Centres were held for both the ROPA9 Master Plan Class Environmental Assessment and the North Glanbrook Industrial Business Park Transportation Master Plan to receive public input on Phases 1 and 2. The Trinity Church Corridor from the Stone Church Road / Red Hill Valley Parkway ramps to south of Rymal Road was identified in these studies as part of the preferred alternative.

This study will fulfill the Phase 3 and 4 requirements for the Trinity Church Corridor project. The Phase 3 and 4 EA will identify alternative design concepts; inventory the natural, social, and economic environments; identify the impacts of the alternative design concepts; evaluate the alternative designs; select a preferred design; and prepare an Environmental Study Report. Upon completion of the study, the
Environmental Study Report will be available for public review and comment. Another advertisement will be published at that time, indicating where and how the public can have access to the report.

PUBLIC INFORMATION CENTRE
Public consultation is vital to this study. We want to ensure that anyone with an interest in this study has an opportunity to get involved and provide input before any decisions are made on the preferred design concept for the Trinity Church Corridor.

The purpose of the Public Information Centre is to present the inventory of the natural, social, and economic environments; alternative design concepts; the evaluation of the alternative design concepts; and the identification of the preliminary preferred alternative. It will be an open house format with an opportunity to speak with project team members on an individual basis.

**Date:** Monday, June 26, 2006
**Open House:** 6:30 to 8:30 p.m.
**Location:** Salvation Army Church, Gymnasium
300 Winterberry Drive (at Paramount Drive)

PUBLIC COMMENTS INVITED
There is an opportunity at any time during this process for interested persons to review outstanding issues and bring concerns to the attention of the project managers. If you have any questions or comments or wish to be added to the mailing list, please contact:

Christine Lee-Morrison, MCIP, RPP
Senior Project Manager,
Capital Planning & Implementation,
Public Works Department
City of Hamilton
320-77 James St. N.
Hamilton, ON L8R 2K3
Phone: 905-546-2424 ext. 6390
Fax: 905-546-4435
Email: cleemorr@hamilton.ca

Nathalie Baudais, P.Eng.
Consultant Project Coordinator,
iTRANS Consulting Inc.
100 York Boulevard, Suite 300
Richmond Hill, ON L4B 1J8
Phone: 905-882-4100, ext. 5282
Fax: 905-882-1557
Email: nbaudais@itransconsulting.com

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act.* With the exception of personal information, all comments will become part of the public record.
NOTICE OF PUBLIC INFORMATION CENTRE
Rymal Road Planning Area (“ROPA 9”) Lands Master Plan
Phase 3 and 4 Class Environmental Assessment

THE STUDY
The City of Hamilton is undertaking an Environmental Assessment for:

- The widening of Rymal Road from Trinity Church Road to Regional Road 56;
- The widening of Regional Road 56 from Rymal Road to approximately 900 m to the south;
- The widening of Stone Church Road from the Red Hill Valley Parkway (RHVP) ramps to Upper Mount Albion Road; and,
- A new road link from Stone Church Road / RHVP ramps to Rymal Road (i.e. the Trinity Church Corridor).

The above noted Phase 3 and 4 study processes will include all localized intersection improvements associated with the specific road projects.

THE PROCESS
These projects are being carried out as Schedule ‘C’ projects under the guidelines of the Municipal Engineers Association, Municipal Class Environmental Assessment (June 2000). The Phase 1 and 2 requirements for the projects were fulfilled under the Rymal Road Planning Area Master Plan (ROPA 9) Class Environmental Assessment, and the North Glanbrook Industrial Business Park Transportation Master Plan. The Phase 1 and 2 requirements identified the needs and opportunities for the corridors, and preliminary alternative solutions to address the servicing issues; included an inventory of the natural, social, and economic environments; evaluated the planning alternatives, and identified a preferred planning alternative.
Public Information Centres were held for both the ROPA 9 Master Plan Class Environmental Assessment, and the North Glanbrook Industrial Business Park Transportation Master Plan to receive public input on Phases 1 and 2 of the studies. A Public Information Centre was also held for the Trinity Church Corridor Class Environmental Assessment to present the inventory of the natural, social, and economic environments; preliminary alternative design concepts; and evaluation of these design concepts.

The Phase 3 and 4 EAs for the Rymal Road Planning Area, and for the Trinity Church Corridor will identify preliminary alternative design concepts and impacts of the alternative designs; provide an evaluation of these design concepts; select a preferred design; and prepare an Environmental Study Report for each project. Upon completion of the studies, the Environmental Study Reports will be available for public review and comment. Another advertisement will be published at that time, indicating where and how the public can have access to the reports.

PUBLIC CONSULTATION

Public consultation is vital to this study. We want to ensure that anyone with an interest in this study has an opportunity to get involved and provide input before any decisions are made on the preferred design concept for the above noted studies.

The purpose of the Public Information Centre is to present the preliminary alternative design concepts; evaluation of these design concepts; and a preliminary preferred alternative for the widening of Rymal Road, Regional Road 56 and Stone Church Road, as noted above.

The preliminary preferred alternative for the new road link from Stone Church Road / Red Hill Valley Parkway (RHVP) ramps to Rymal Road (i.e. the Trinity Church Corridor) has been refined since the June 26, 2006 PIC and will also be on display for further input.

The meeting will be an Open House format with an opportunity to speak with project team members on an individual basis. You are invited to attend and participate in the meeting. City staff and their consultants will be available at the meeting to provide details. Details of the date, time, and location of the meeting are as follows:

Date: Thursday, October 12, 2006
Open House: 6:00 to 8:00 p.m.
Location: Salvation Army Church, Gymnasium
300 Winterberry Drive (at Paramount Drive), Stoney Creek

PUBLIC COMMENTS INVITED

There is an opportunity at any time during this process for interested persons to review outstanding issues and bring concerns to the attention of the Study Project Managers. If you have any questions or comments, or wish to be added to the study mailing list, please contact:
Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

This Notice issued September 29 and October 6, 2006
NOTICE OF PUBLIC INFORMATION CENTRE

THE STUDY
The City of Hamilton is undertaking the Trinity Neighbourhood Collector Class EA process to identify and evaluate alternative road alignments and design concepts for a new collector road within the Trinity Neighbourhood. A Class EA is also underway for a new road link from Stone Church Road / RHVP ramps to Rymal Road (i.e. the Trinity Church Corridor). The Study Areas are shown below.

THE PROCESS
This project is being carried out as a Schedule ‘C’ project under the guidelines of the Municipal Engineers Association, Municipal Class Environmental Assessment (June 2000). The Phase 1 and 2 requirements for the project were fulfilled under the Rymal Road Planning Area Master Plan (ROPA 9) Class Environmental Assessment. The Phase 1 and 2 requirements identified the needs and opportunities for the corridor, and preliminary alternative solutions to address the servicing issues; included an inventory of the natural, social, and economic environments; evaluated the planning alternatives, and identified a preferred planning alternative. Public Information Centres were held for the ROPA 9 Master Plan Class Environmental Assessment to receive public input on Phases 1 and 2 of the study. The Trinity Neighbourhood Collector road was identified as one of the preferred planning alternatives.

This study will fulfil the Phase 3 and 4 requirements for the Trinity Neighbourhood Collector project. The Phase 3 and 4 EA will identify preliminary alternative design concepts, and impacts of the alternative designs; provide an evaluation of these design concepts; select a preferred design; and prepare an Environmental Study Report. Upon completion of the study, the Environmental Study Report will be available for public review and comment. Another advertisement will be published at that time, indicating where and how the public can have access to the report.
PUBLIC CONSULTATION

Public consultation is vital to this study. We want to ensure that anyone with an interest in this study has an opportunity to get involved and provide input before any decisions are made on the preferred design concept for the Trinity Neighbourhood Collector. The purpose of the Public Information Centre is to present the preliminary alternative design concepts; and a preliminary preferred design for the Trinity Neighbourhood Collector. The meeting will be an Open House format with an opportunity to speak with project team members on an individual basis. The preliminary preferred alternative for the new road link from Stone Church Road / Red Hill Valley Parkway (RHVP) ramps to Rymal Road (i.e. the Trinity Church Corridor) has been refined and will also be on display for further input.

PUBLIC COMMENTS INVITED

There is an opportunity at any time during this process for interested persons to review outstanding issues and bring concerns to the attention of the Study Project Managers. If you have any questions or comments or wish to be added to the mailing list, please contact:

Christine Lee-Morrison, MCIP, RPP  
Senior Project Manager,  
Capital Planning & Implementation,  
Public Works Department  
City of Hamilton  
320-77 James St. N.  
Hamilton, ON L8R 2K3  
Phone: 905-546-2424 ext. 6390  
Fax: 905-546-4435  
Email: cleemorr@hamilton.ca

Liza Sheppard, P.Eng.  
Senior Project Manager,  
iTRANS Consulting Inc.  
100 York Boulevard, Suite 300  
Richmond Hill, ON L4B 1J8  
Phone: 905-882-4100, ext. 5232  
Fax: 905-882-1557  
Email: lsheppard@itransconsulting.com

PUBLIC INFORMATION CENTRE DETAILS

Date: Wednesday, October 18, 2006  
Open House: 6:00 to 8:00 p.m.  
Location: Salvation Army Church, Gymnasium  
300 Winterberry Drive (at Paramount Drive), Stoney Creek

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

This notice issued October 6 and 13, 2006.
NOTICE OF COMPLETION
Trinity Church Arterial Corridor
Class Environmental Assessment

THE STUDY

The City of Hamilton has completed the Class Environmental Assessment (EA) process to identify and evaluate alternative road alignments and design concepts for a new road link from the Stone Church Road / Red Hill Valley Parkway ramps to south of Rymal Road. The Study Area is shown below.

THE PROCESS

This study has been undertaken in accordance with the Municipal Engineers Association, Municipal Class Environmental Assessment document (June 2000) and will satisfy Phase 3 and 4 of the planning and design process. The study was presented at public information centres held on June 26, 2006, October 12, 2006 and October 18, 2006. No comments were received that cannot be addressed.

The Phase 1 and 2 requirements of the planning and design process for the ROPA 9 study area were fulfilled by the Rymal Road Planning Area Class EA Master Plan Report which was endorsed by Hamilton City Council on June 14, 2006 and was available to the public for review between June 16 and July 18, 2006.

The Phase 1 and 2 requirements of the planning and design process for the North Glanbrook study area were fulfilled by the North Glanbrook Transportation Master Plan
Report which was endorsed by Hamilton City Council on July 12, 2006 and was available to the public for review for a period of 45 days from December 1, 2006.

This notice of completion is issued for the Trinity Church Arterial Corridor addressed in this Environmental Study Report, which includes:

- A new 4 lane (2 through lanes in each direction) arterial corridor from the Red Hill Valley Parkway-Stone Church Road intersection to south of Rymal Road.
- Provision of traffic signals at the intersection with Stone Church Road.
- Provision of a roundabout at the intersections with Highland Road, Midblock Collector, Rymal Road and Twenty Road. The roundabout intersections are subject to further assessment during detailed design. Should the roundabouts be determined unfeasible during detailed design, signalization will be implemented, where warranted.
- Provision of an urban cross-section for the Trinity Church Arterial Corridor north of Rymal Road and a rural cross-section south of Rymal Road.

PUBLIC COMMENT INVITED

A Class EA Environmental Study Report documenting the planning process undertaken and conclusions reached will be on public record for a period of 45 calendar days in accordance with the municipal Class EA. The “Review Period” will begin on June 15, 2007 and end on July 30, 2007. The Class EA Environmental Study Report is available for public review at the following locations:

<table>
<thead>
<tr>
<th>Hamilton Public Library, Valley Park Branch</th>
<th>Office of the City Clerk</th>
<th>City Centre Public Works Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>970 Paramount Drive Hamilton, Ontario L8J 1Y2 (905) 573-3141</td>
<td>71 Main Street West City Hall, 2nd Floor Hamilton, Ontario L8P 4Y5 (905) 546-CITY</td>
<td>77 James Street North Suite 320 Hamilton, Ontario L8R 2K3 (905) 546-CITY</td>
</tr>
</tbody>
</table>

Subject to comments received as a result of this notice, the City of Hamilton intends to proceed with the implementation (i.e Phase 5 of the Municipal Class EA process) of the recommended projects. If after reading the Class EA Environmental Study Report, you have questions or concerns, please follow the following procedure:

1. Contact the following City staff to discuss your questions or concerns:

   Mohan Philip M. Eng.
   Project Manager, Strategic Planning
   Capital Planning & Implementation,
   Public Works Department, City of Hamilton
   320-77 James St. N.
   Hamilton, ON L8R 2K3
   Phone: 905-546-2424 ext. 3438
   Fax: 905-546-4435
   Email: eplanning@hamilton.ca
2. Arrange a meeting with the above if you have significant concerns that may require more detailed explanation.

3. If you raise major concerns, the City will attempt to negotiate a resolution of the issues. A mutually acceptable time period for this negotiation will be set. If the issues remain unresolved, you may request the Minister of the Environment, by order, to require the City to comply with Part II of the Environmental Assessment Act before proceeding with the Schedule C projects. This is called a Part II Order ("bump up"). The Minister may make one of the following decisions:

- Deny the request
- Refer the matter to mediation
- Require the City to comply with Part II of the Environmental Assessment Act by undertaking one of the following:
  - Submitting the Class EA Environmental Study Report for government review and approval; or,
  - Completing an Individual Environmental Assessment for government review and approval; or,
  - Preparing Terms of Reference governing the preparation of an Individual Environmental Assessment.

Requests for a Part II Order must be submitted in writing to the Minister of the Environment within the 30 day review period:

Minister of Environment  
Environmental Assessment and Approvals Branch  
135 St. Clair Avenue West, 12th Floor  
Toronto, ON M4V 1P5

A copy of the Part II Order must also be sent to the City of Hamilton, to the attention of the Project Manager (address above).

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

This notice issued June 15 and June 22, 2007.
WELCOME

PUBLIC INFORMATION CENTRE

Trinity Church Corridor
Class Environmental Assessment Study

Monday, June 26, 2006

City of Hamilton

PUBLIC WORKS DEPARTMENT
Capital Planning & Implementation Division
Strategic and Environmental Planning Section
STUDY AREA

The City of Hamilton has initiated the Trinity Church Corridor Class Environmental Assessment (EA) process to identify and evaluate alternative road alignments and design concepts for a new road link from the Stone Church Road / Red Hill Valley Parkway ramps to Rymal Road and south to serve the North Glanbrook Industrial Business Park.

The Study Area is shown below.
STUDY BACKGROUND

- The City of Hamilton Council approved the recommendation to initiate a Master Plan Class Environmental Assessment for the Rymal Road Planning Area. The Rymal Road Planning Area Master Plan Environmental Assessment has been approved by Council (June 14, 2006) and filed on public record. The document is available for public review and comment.

- The North Glanbrook Industrial Business Park (NGIBP) Transportation Master Plan was prepared to identify a road network that will support the redevelopment of the lands in accordance with the current approved land uses for the area. The NGIBP Master Plan will be presented to Council for endorsement and direction to file on public record in the Summer 2006.

Both of these studies provided input to the Trinity Church Corridor Environmental Assessment.
CLASS ENVIRONMENTAL ASSESSMENT PROCESS
STUDY PUBLIC CONSULTATION PLAN

- Opportunities for public input are provided throughout the process. Public input is gathered through public meetings, telephone inquiries, letters, email and faxes.

- Comments are always welcome. Formal public consultation points, which are also shown on the EA Process panel, are as follows:
  - Phase 2 - Public Information Centre #1 for ROPA9 Master Plan – October 3, 2005
    Public Information Centre #1 for NGIBP Master Plan – June 29, 2005
    Public Information Centre #2 for NGIBP Master Plan – May 16, 2006
  - Phase 3 - Public Information Centre #1 for Trinity Church Corridor EA – June 26, 2006 (Tonight)
    Supplementary Public Consultation for Trinity Church Corridor EA – Fall 2006
  - Phase 4 - Environmental Study Report (ESR) to Council - Fall 2006; File ESR on public record - Fall 2006

- Upon filing of the ESR, a public notice of the study completion will be published in the “Glanbrook Gazette”, “Mountain News”, “Stoney Creek News”, and the Hamilton Spectator “At Your Service”.

- The ESR will be available for public review and comment for a required minimum 30-day review period.

- During the 30-day review period, you may request that the project be ‘bumped-up’ to a Part II Order (formerly known as the “bump-up” request); if you feel, after consulting with the City, that serious environmental concerns remain unresolved. The decision to ‘bump-up’ the project to a Part II Order rests with the Minister of the Environment.
NEEDS AND OPPORTUNITY

Transportation assessments were conducted for servicing the ROPA 9 lands, and the North Glanbrook Industrial Business Park. Key findings of these studies to the needs and opportunity for the Trinity Church Corridor are as follows:

- Additional north-south capacity (equivalent to 2 lanes per direction) by 2011 between Rymal Road and Red Hill Valley Expressway ramps to service the increasing north-south traffic demands.

- Accommodation of high southbound left turn demand at Rymal Road from the freeway network by 2021.

- Maintaining the existing north-south capacity between Rymal Road to south of Twenty Road, and protecting for additional capacity in the long term.

- Improving services for transit usage, and facilities for pedestrian and cyclist usage to serve the community, as development of the Rymal Road Planning Area and the North Glanbrook Industrial Business Park proceeds.
PROBLEM AND OPPORTUNITY STATEMENT

Transportation solutions are necessary:
1. To provide additional north-south capacity to facilitate development in the surrounding areas of ROPA 9, Special Policy Area ‘C’ and the North Glanbrook Industrial Business Park;
2. To resolve transportation network discontinuities;
3. To improve service for autos, commercial vehicles, transit vehicles, pedestrians, and cyclists; and
4. To manage traffic impact on local roads adjacent to the study area.
5. Allow for flexibility in the proposed network to accommodate long-term growth planned for the Airport Lands as they will require accessibility to / from the Red Hill Valley Parkway.
## EXISTING OFFICIAL PLAN POLICIES

<table>
<thead>
<tr>
<th>Road</th>
<th>Current Designation</th>
<th>Designated Right-of-Way</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stone Church Road</td>
<td>Arterial</td>
<td>36 m</td>
</tr>
<tr>
<td>Rymal Road (Highway 53)</td>
<td>Arterial</td>
<td>36 m</td>
</tr>
<tr>
<td>Twenty Road</td>
<td>Collector</td>
<td>30 m</td>
</tr>
<tr>
<td>Dickenson Road</td>
<td>Arterial</td>
<td>36 m</td>
</tr>
<tr>
<td>Upper Mount Albion Road</td>
<td>Local</td>
<td>20 m</td>
</tr>
<tr>
<td>Trinity Church Road</td>
<td>Arterial</td>
<td>36 m</td>
</tr>
<tr>
<td>Pritchard</td>
<td>Local</td>
<td>20 m</td>
</tr>
<tr>
<td>Glover</td>
<td>Collector</td>
<td>26 m</td>
</tr>
<tr>
<td>Dartnall</td>
<td>Arterial</td>
<td>36 m</td>
</tr>
</tbody>
</table>

### Local Road:
Provide direct access to abutting properties and carry traffic predominantly of local nature.

### Collector Road:
Function as connecting road links between arterial and local roads; generally carry lower traffic volumes than arterial roads.

### Arterial Road:
Strategic links in the road network, the main functions of which are to carry relatively high volumes of long distance traffic.
EXISTING CONDITIONS

Roadway

- Trinity Church Road is a north-south arterial with a basic 2-lane rural cross-section.

Existing deficiencies include:

- Given the local designation of Upper Mount Albion Road, existing volumes are approaching the typical capacity of a local road (approximately 1,000 vehicles per day).

- The road network is discontinuous within the vicinity of Trinity Church Road between Rymal Road and the Lincoln Alexander Parkway.

Environmental

Socio-Economic

- Land use in the Study Area is predominantly agricultural and residential, with some commercial uses.

- Active development is occurring in the vicinity of the Study Area.

- Several residential dwellings are also located along the Trinity Church Road corridor.

- The Trinity United Church and Cemetery is located along this corridor at 10 Trinity Church Road.

- Buried utilities and above ground utility lines are present throughout the Study Area.
LAND USE MAP
EXISTING CONDITIONS (Cont’d)

Natural Environment – Aquatic and Terrestrial

- No Environmentally Significant Areas (ESAs) or Evaluated Wetlands are located within the study area. Redhill Valley ESA is located along the main branch of Redhill Creek downstream of the study area.

- The Eramosa Karst Area of Natural and Scientific Interest (ANSI) is located east of the study area.

- The vegetation communities identified within the Study Area are considered common and widespread throughout Ontario.

- No provincially significant plant species were identified during the field reconnaissance. Six locally rare plant species and one locally uncommon plant species were identified in the Hannon Creek subwatershed field reconnaissance.

- The wildlife habitat in the study area comprises roadside ditches, agricultural fields, hedgerows, cultural meadows, cultural thickets and Hannon Creek.

- A total of 54 wildlife species were recorded field investigations. The habitat types found within the area and secondary source information suggests that a total of 65 wildlife species (four herpetofauna, 48 birds and 13 mammals) are potential residents of the area.

- The *Fish and Wildlife Conservation Act* regulates ten of the 13 mammal species recorded plus one herpetofauna and three bird species. The *Migratory Birds Convention Act* regulates 38 of the 48 bird species. Fourteen of the bird species that could potentially nest in the study area are recommended by Bird Studies Canada as priority species for conservation in Hamilton-Wentworth.
EXISTING CONDITIONS (Cont’d)

Natural Environment – Aquatic and Terrestrial Continued

- A total of five tributaries of Red Hill Creek pass through the Study Area. A total of two tributaries of Sinkhole Creek pass through the Study Area.

- Red Hill Creek and Sinkhole Creek tributaries typically support warmwater baitfish communities, with species such as brook stickleback, goldfish, fathead minnow, and largemouth bass.

- Historical fish collection records indicate the presence of a warmwater fish community in the Red Hill Creek watershed upstream from Albion Falls, though more recent records suggest all but brook stickleback have been extirpated from this portion of the watershed.

Archaeology and Cultural Heritage

- At least 55 archaeological sites are within 2 km of the Study Area.

- One cemetery is noted within the Study Area.

- A number of residences are identified as built heritage features and a farm complex of 40 years or older is located along Rymal Road East within the Study Area. The intersection of Trinity Church Road and Rymal Road is also identified as sensitive to change.

- All identified built heritage features and cultural heritage landscapes have a local interest designation.

- Two buildings identified within the Study Area are listed in the Hamilton’s Heritage Volume 2: Inventory of Buildings of Architectural and/or Historical Interest.
CULTURAL HERITAGE FEATURES

LEGEND

★ Heritage or Cultural Feature

* Heritage Feature listed in Hamilton’s Heritage Volume 2: Inventory of Buildings of Architectural and/or Historical Interest

Note:
BHF = Built Heritage Feature
CHL = Cultural Heritage Landscapes
OTHER APPLICABLE POLICIES

The GRIDS (Growth Related Integrated Development Strategy) Transportation Master Plan Policy Papers outlines the following transportation objectives:

■ Offer safe and convenient access for individuals to meet their daily needs.

■ Offer a choice of integrated travel modes, emphasizing active transportation, public transit and carpooling.

■ Enhance the liveability of neighbourhoods and rural areas.

■ Encourage a more compact urban form, land use intensification and transit-supportive node and corridor development.

■ Protect the environment by minimizing impacts on air, water, land and natural resources.

■ Support local businesses and the community’s economic development.

■ Operate efficiently and be affordable to the City and its citizens.
ROPA 9 ALTERNATIVE SOLUTIONS

At the October 2005 Public Information Centre, an assessment and evaluation of alternative solutions to address the problem statement (capacity and operational deficiencies in the ROPA 9 Study Area), was presented. The alternatives included:

1. Do Nothing
2. Travel Demand Management (modify travel demand to reduce the growth of single-occupant vehicular travel during the peak travel periods, such as designated HOV lanes, carpooling, increase in transit usage)
3. Upgrade Other Routes / Build Other Routes
4. Operational Improvements (increase the capacity of the existing road network, such as changes to traffic signal timings and phasings, intersection geometric improvements, adding or changing exclusive turn lanes at intersections)
5. Widen Rymal Road to provide additional through lanes throughout the corridor
6. Extend Trinity Church Road north of Rymal Road to provide additional north-south capacity
7. Widen Regional Road 56 to provide additional through lanes throughout the study section

The alternatives were evaluated based on their ability to address the problem statement, including impacts to infrastructure, and environmental and cost impacts.

Through the assessment and evaluation, it was concluded that a new road link from the Red Hill Valley Parkway to south of Rymal Road was part of the preferred alternative.
ROPA 9 ALTERNATIVE SOLUTIONS

At the January 26, 2006 Public Information Centre, an assessment and evaluation of alternative solutions to address the traffic operations issues in the Trinity Neighbourhood was presented. The assessment and evaluation concluded that as part of the preferred alternative, the closure of Upper Mount Albion Road should be coordinated with the implementation of the new road link from the Red Hill Valley Parkway to south of Rymal Road, therefore this study will address the closure details for Upper Mount Albion Road.

The ROPA 9 Master Plan also recommended that:
- Transit service be considered along the Trinity Church Corridor;
- Potential new transit stops at intersections with Stone Church Road, Highland Road, proposed trail head for the Red Hill Valley Open Space Replacement Strategy be considered;
- Sidewalks and bicycle routes be considered for the Trinity Church Corridor extension; and
- A carpool lot be considered along the Trinity Church Road Corridor, due to its proximity to the Lincoln Alexander Parkway and the Red Hill Valley Parkway.

This study will address these recommendations.
NGIBP ALTERNATIVE SOLUTIONS

At the May 2006 Public Information Centre, an assessment and evaluation of alternative networks to support the planned future development was presented. The alternatives included:

1. Do Nothing
2. Simple Grid;
3. Modified Grid;
4. Secondary Plan; and

The alternatives were evaluated based on their ability to address the problem statement, including environmental and cost impacts.

Through the assessment and evaluation, it was concluded that a 2-lane arterial in the Trinity Church Road Corridor from south of Twenty Road to Rymal Road (protect for 4 lanes) was part of the preferred alternative.

Improvements required outside of the Secondary Plan Area were also presented at the May 2006 PIC. They included a 4-lane arterial from Rymal Road to Stone Church Road.
The primary study area is the Secondary Plan area shown in the former Township of Glanbrook Official Plan.

In order to examine network options a broader area was considered. This included corridor connections to the future Red Hill Valley Parkway (RHVP) / Lincoln Alexander Parkway to the north and John C. Munro Airport to the west.

The following summarize some observations about the existing network:

- Roadways within the Secondary Plan area currently carry traffic volumes well below the available road capacity.

- Major roadways adjacent to the Secondary Plan area such as Rymal Road and Lincoln Alexander Parkway are heavily travelled, experiencing congestion during peak travel periods.

- Although not within the scope of the study, new or upgraded transportation corridors from the Secondary Plan area to the Lincoln Alexander Parkway and the future RHVP will be required to support development and ensure maximum accessibility to the Secondary Plan area and to reduce impacts on adjacent arterial roadways.

Note: Additional local roads will be required to connect to the municipal collector and arterial network. These roads will be determined as part of the subdivision planning process.

All arterial and collector roads will be designed to accommodate future transit as determined by HSR.

Note: This map has been taken from previous Public Information Centre (North Glanbrook Industrial Business Park Transportation Master Plan)
COMMENTS FROM PUBLIC INFORMATION CENTRES

A number of concerns have been brought to the project team’s attention through consultation with the public for the Rymal Road Planning Area Master Plan Environmental Assessment and the North Glanbrook Industrial Business Park Transportation Master Plan. The comments received as part of the studies which are relevant to the Trinity Church Corridor EA are summarized below.

ROPA 9 Master Plan PIC Comments:
- Comments on the need for a new north south link between Rymal Road and the Red Hill Valley Parkway/Stone Church Road ramps;
- Concerns regarding the delays to implementing the link;
- Concerns regarding the alignment alternatives;
- Concerns regarding the potential impacts of a new north-south roadway on adjacent properties,
- Suggestions for consideration of other routes
- Comments on operational issues (increased traffic volumes, speeding, safety, truck traffic) on Upper Mount Albion Road, with suggestions to close the road.
- Suggestions for improvements to transit service in the study area.

NGIBP Transportation Master Plan PIC Comments:
- Former Township of Glanbrook Council’s commitment for berms to protect homes on Trinity Church Road from noise and pollution and limiting access from Trinity Church Road to the park; and
- Requests to have roads routed behind the houses on Trinity Church Road and all service roads kept within the Industrial Business Park.
DESIGN CRITERIA

The new arterial road link is recommended to:

- provide a connection to the ROPA 9 and Heritage Green community traffic from the Parkway system.
- serve as an extension and transition of the Red Hill Valley Parkway to an arterial road.
- provide a connection further south as a component of the road network to serve the North Glanbrook Industrial Business Park and to service lands to the south.

Each of these needs reflects a major arterial road role.

Typical cross-sections were developed to anticipate right of way needs for the corridor. The cross-sections shown illustrate standard lane widths, streetscape features, rural drainage and/or accommodation of urban boulevard features including sidewalk.

Right-of-way Requirements:

- 4-lanes
- Shoulders
- Exclusive turning lanes
- Sidewalks
- Bike paths
- Streetscaping
- Utilities
- Ditches or Curb and Gutter
- Median
ALTERNATIVE DESIGNS

The technically preferred planning solution is to provide a new 4-lane arterial road link between the Red Hill Valley Parkway Ramps to south of Rymal Road. As such, initial Alternative Design Concepts for the alignment of the 4-lane arterial road connection for the Trinity Church Corridor include:

- Alignment east of the existing Trinity Church Road
- Extension of the existing Trinity Church Road from Red Hill Valley Parkway ramps at Stone Church Road to Rymal Road and widening of the existing Trinity Church Road south of Rymal Road
- Alignment between Pritchard Road and existing Trinity Church Road
- Alignment near Pritchard Road
- Alignment on Pritchard Road

Additional roadway enhancements / improvements could include:

- Enhanced pedestrian environment
- Wider curb lanes that could accommodate cyclists
- Improved access to side streets and driveways
- Enhanced streetscaping
DESIGN ALTERNATIVES ASSESSMENT CRITERIA

The assessment criteria for evaluating the design alternatives include impacts on the transportation network, impacts to the natural, social and economic environments, and costs, as follows:

Transportation Services
- Corridor Capacity and Level of Service
- Access for Emergency Vehicles
- Network Connectivity
- Compliance with the North Glanbrook Industrial Business Park Master Plan
- Flexibility for Future Network Connections (e.g. Airport)
- Accommodation for Pedestrians and Cyclists
- Traffic Safety
- Access to Adjacent Lands
- Geometric Standards
- Transit Operations
- Travel Demand Management
- Construction Staging – Implications on Transportation

Natural Environment
- Vegetation
- Wildlife
- Aquatic Habitat
- Eramosa Karst
- Stormwater
DESIGN ALTERNATIVES ASSESSMENT
CRITERIA CONTINUED

Socio-Economic Impacts
- Property Requirements for Right-of-Way
- Residents
- Businesses
- Noise
- Archaeological / Cultural Heritage Resources
- Air Quality
- Agriculture
- Recreation
- Institutions
- Allows for Servicing to Adjacent Lands
- Construction Staging – Implications on Residents / Institutions
- Impacts on residents in adjacent areas

Costs
- Utility relocation
- Capital cost
- Maintenance and Operation Costs
- Potential for Contamination
- Property Acquisition
- User Costs
# EVALUATION OF DESIGN ALTERNATIVES CHART

**ANALYSIS AND EVALUATION OF DESIGN ALTERNATIVES FOR TRINITY CHURCH ROAD EXTENSION**

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
<th>Option 4</th>
<th>Option 5</th>
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<td>Geometric Standards</td>
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<td>Road Operations</td>
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<td>Travel Demand Management</td>
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<td>Construction staging of Rydal Road - Implications on Transportation</td>
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**LEGEND**

- Most preferred
- Preferred
- No preference
- Least preferred
# EVALUATION OF DESIGN ALTERNATIVES

## Chart

### Analysis and Evaluation of Design Alternatives for Trinity Church Road Extension

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### Alternatives Carried Forward

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PUBLIC WORKS DEPARTMENT
Capital Planning & Implementation Division
Strategic and Environmental Planning Section
FUTURE ACTIONS

- We will review all comments and suggestions received from the public and agencies.

- Based on public and agency input, we will:
  - Develop Alternatives carried forward
  - Select a technically Preferred Design Alternative
  - Prepare a preliminary design for the Preferred Design Alternative

The next Public Consultation Event is tentatively scheduled for Fall 2006. At this time, we will present and request your input on:

- The evaluation of the Alternative Designs carried forward
- A preliminary Preferred Design
YOUR INPUT IS IMPORTANT

Your input is important.

We invite you to fill in the comment sheet with your comments and suggestions.

If you wish to be put on our mailing list, require further information, or wish to provide input to the study, you can contact us in the following ways:

Christine Lee-Morrison
Project Manager
City of Hamilton
Public Works Department
320-77 James Street North
Hamilton, ON L8R 2K3

Phone: (905) 546-2424 ext. 6390
Fax: (905) 546-4435
E-Mail: cleemorr@hamilton.ca

Nathalie Baudais, P.Eng.
Consultant Project Coordinator
iTRANS Consulting Inc.
100 York Boulevard, Suite 300
Richmond Hill, ON L4B 1J8

Phone: (905) 882-4100, ext. 5282
Fax: (905) 882-1557
Email: nbaudais@itransconsulting.com

Please also note that information on the project can be found on the City’s website at the following address:

www.hamilton.ca/ropa9
Trinity Church Arterial Corridor
Class Environmental Assessment

Summary of

PUBLIC INFORMATION CENTRE #1

Trinity Church Arterial Corridor
Class Environmental Assessment Study

Phase 3 and 4

Monday, June 26th, 2006
From 6:30 PM to 8:30 PM

City of Hamilton
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5. CONCLUSIONS..................................................................................................... 8
1. INTRODUCTION

The first Public Information Centre (PIC#1) was held on Monday, June 26\textsuperscript{th}, 2006, at the Salvation Army Church Gymnasium, 300 Winterberry Drive, in the City of Hamilton. The purpose of the PIC#1 was to present the inventory of the natural, social, and economic environments; alternative design concepts; the evaluation of the alternative design concepts; and the identification of the short listed alternatives. The format was an open house format with an opportunity to speak with project team members on an individual basis and to view the display panels and drawings.

Approximately 60 members of the public attended the PIC. The following representatives from the project team were in attendance:

City of Hamilton: Christine Lee-Morrison, Project Manager – Strategic Planning
Mohan Philip – Strategic Planning
Vanessa Grupe – Community Planning
Emily Groth – Strategic Planning

iTRANS Consulting: Ray Bacquie, Study Project Manager
Nathalie Baudais, Transportation Planner

LGL: Leslie Collins, Botanist

Councillor Phil Bruckler of Ward 9 of the City of Hamilton was also in attendance.

2. NOTIFICATION

Advertisements were placed in the Hamilton Spectator on Friday, June 16, 2006 and Friday, June 23, 2006, and in the Brabant paper on Friday, June 16, 2006 informing the public of the PIC. Notification letters were also mailed out to property owners within the study area, to other individuals who had responded with an interest in the study since its commencement, to conservation authorities, Federal and Provincial agencies, and utility companies.

3. PIC PRESENTATION MATERIAL

Upon arrival at the PIC, attendees were asked to sign a visitor registration sheet. Fifty seven people signed the registration sheet.

Twenty-nine panels were displayed. The information panels included the following:

- Welcome and study area
- Description of the study background
- Chart of the Class EA process
4. SUMMARY OF QUESTIONS AND COMMENTS

The questions asked and comments received verbally or via comment sheets at the PIC and comments/questions received after the PIC via e-mail, letters and telephone calls are summarized below:
<table>
<thead>
<tr>
<th>Comments Regarding the Needs, Opportunities, and Problem Statement Presented</th>
<th>Responses</th>
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</thead>
<tbody>
<tr>
<td>I feel you are not helping the problem but are adding to the problem. You need to keep it simple. You need to cut down on the road building and try using the roads that are in place. You need to use less intersections with traffic lights.</td>
<td>The need for the Trinity Church Corridor was established during the needs assessment in the Master Plan which was filed in July 2006. Existing traffic volumes on Upper Mount Albion Road are at the functional capacity of a typical local road. Upper Mount Albion is currently providing an important role and function as a north-south link between Rymal Road and Stone Church Road. As such, it is operating more as an arterial roadway function, although it is designated a local road. Future traffic volumes are anticipated to exceed the capacity of a local road under 2011 and 2021 conditions. Traffic management measures to limit or reduce traffic levels on Upper Mount Albion Road and to keep its local road function, would be appropriate by 2011. However, additional north-south capacity at the west end of the Study Area would be required to accommodate the diverted traffic, and should therefore be coordinated with construction of a new roadway to provide this capacity. At the same time, there is also insufficient north-south capacity in the Study Area road network to accommodate future traffic demands. Additional north-south capacity (equivalent to 2 lanes per direction) is needed in the vicinity of Trinity Church Road by 2011. A 4-lane extension of Trinity Church Road north of Rymal Road would have sufficient capacity to accommodate future traffic demands, including diverted traffic, should Upper Mount Albion Road be closed to through traffic. The North Glanbrook Industrial Business Park Master Plan has identified a need for a longer-term extension of Trinity Church Road to continue south of Rymal Road to service the Business Park and to allow flexibility for a potential future connection to the airport.</td>
</tr>
<tr>
<td>Pleased to see “manage traffic impact on local roads” comment. Trinity Church Rd is already taking the brunt of traffic coming from the new subdivisions in Binbrook Village. Rymal Rd should be expanded to 4 lanes as soon as possible with the installation of the proposed traffic light at the intersection of Fletchers and Rymal a.s.a.p. as well. At this time it is very difficult to turn left from Trinity Church at Rymal/ Second Rd West left toward Elfrida (Someone hit me last Friday morning trying to turn left from that intersection). Another stoplight might help the flow of traffic (create “breaks”) in addition to the one at Walmart entrance.</td>
<td>Comment noted. The widening of Rymal Road will be addressed by the Rymal Road Planning Area Class Environmental Assessment Study which is occurring concurrently. The Rymal Road Planning Area EA also addressed the traffic control at intersections along the corridor. The study recommended the installation of traffic signals at the Rymal Road / Trinity Church Road intersection and traffic signals at the Rymal Road / Second Road West and Rymal Road / Fletcher Road intersections.</td>
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<tr>
<td>Comments for Evaluation Criteria Used</td>
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<tr>
<td>I have been to the Valley Park Library to look at the Class EA Master Plan Report and also to the Hamilton website. I found the information helpful. Pleased to see consideration for “impacts on residents” and “implications on residents” as part of the evaluation criteria.</td>
<td>Comment noted. Comment noted.</td>
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<tr>
<td>Comments for Alternative Transportation Alignments</td>
<td>Responses</td>
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<td>---------------------------------------------------</td>
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<tr>
<td>I do not agree with the preliminary preferred alignment for Trinity Church Corridor or the Dartnall Rd. Extension. The Red Hill Extension needs to go south over Highland then west to the base of Anchor Rd. then south to Glover and Rymal Rd. The extension will have no stops on it until it reaches Glover and Rymal. A light will be needed and Glover needs to be widened to four lanes up to Twenty Rd. This will put the Red Hill extension in the middle of the Glanbrook Industrial Park. The road between Glover and Trinity Church, at Twenty Road needs to be built. The lands in the park need to be kept big to draw big industry. The Dartnall Rd. Extension needs to start at Rymal and run over the 198 sewer line into the base of the Park then south over Twenty, turning west to Nebo Rd. Dartnall needs to be hooked up to this road. The new road name could be called Felker Drive. The road needs to be built on higher ground. Please see map for both roads.</td>
<td>Alternative 4 was established as the preferred design alternative since it allows for a desirable geometry, results in more developable land and maintains the original intent of the Secondary Plan (which designates light industrial west of the Trinity Church Corridor and service commercial and residential to the east) and results in lesser impact to the environmentally sensitive black walnut cultural woodlot relative to the other options.</td>
</tr>
<tr>
<td>I totally agree with the route alternatives. The road should be between Trinity Church to Pritchard connecting to the Glanbrook Industrial Park. Options No. 5 and 6. The best of the 3 would be #6.</td>
<td>Comment noted.</td>
</tr>
<tr>
<td>The alternative transportation alignment that makes more sense is Option #3, by connecting Trinity Church Road to the Red Hill Expressway Exit – then upgrade Dickenson Road from Trinity Church Road to Nebo Road. Also upgrade Nebo Road and Glover Road from Rymal Road to Dickenson Road – Once these roads are upgraded it will be very easy to service the Glanbrook Industrial Park from any cardinal point, North, South, East and West. It is more economic to upgrade existing roads than to build new ones.</td>
<td>Although Option 3 would provide a more direct route, it was screened out for several reasons, including potential impacts to:  - Existing properties, - Existing residents, - Two built heritage features, - Two cultural heritage landscapes, - Trinity United Church and access from parking lot across Trinity Church Road, and - Sinkhole</td>
</tr>
<tr>
<td>Trinity Church Rd. from Red Hill Exit will be best to service the Industrial Park.</td>
<td>Although Option 3 would provide a more direct route for transportation and servicing, it was screened out for several reasons, including potential impacts to:  - Existing properties, - Existing residents, - Two built heritage features, - Two cultural heritage landscapes, - Trinity United Church and access from parking lot across Trinity Church Road, and - Sinkhole</td>
</tr>
<tr>
<td>Comments</td>
<td>Responses</td>
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</tbody>
</table>
| Prefer #6 (aqua colour) – the one that crosses Rymal right at Pritchard. Will be the least impact on the “commercial” sites along Rymal; #5 the “red” route cuts through/too close to the Hamilton Back Clinic “lot”. The houses on Pritchard Road have already been either purchased or left to “rack and ruin” knowing that this extension from Red Hill Expressway was going to happen “in the future” twenty years ago. Both red (#5) and aqua (#6) are more centrally located between Glover and Trinity Church (keeping the road away from existing residences back of the lots on both roads) but #6 aqua is better closer to Rymal away from commercial zoned lots on Rymal. Do not want to see roads from the North Glanbrook Industrial Park have access to Trinity Church Rd! The “Twenty Road” extension out to Trinity Church has never been on any other proposal – don’t want it/ don’t need it. The proposed “Twenty Road extension and the proposed “North Collector Road” should not in any circumstance exit onto residential Trinity Church Road. At Rymal, use a “roundabout” (4 lane) like the one proposed for #56 Highway in Binbrook. | These comments were taken into account in the further evaluation of options 4, 5, and 6. However, Option 4 was found to be preferable for several reasons, including:  
- Does not create odd-shaped parcels within the East Mountain Industrial Business Park.  
- The geometry of the new midblock collector road in the East Mountain Industrial Business Park satisfies the desirable tangent lengths and sight lines. Back to back curves on both Option 6 and the midblock collector are not desirable.  
- More in keeping with the original intent of the Secondary Plan, which designates light industrial west of the Trinity Church Corridor and service commercial and residential to the east.  
- Results in more developable land. The further east the road is, the more residential/commercial land is created and less light industrial.  
- Avoids impacts to the black walnut cultural thicket  
- Avoids impacts to the Hamilton Back Clinic lot  
A multi-lane roundabout (2-lanes) is recommended for the intersection of Trinity Church Arterial Corridor / Rymal Road. The extension of “Twenty Road” and the “North Collector Road” to the existing Trinity Church Road are not needed and have been removed. |
5. CONCLUSIONS

In general, the public was supportive of the project. Most of the comments received were in favour of the short-listed alternative design options.

Copies of the comments are on file with the City.
Meeting Minutes

Project: Trinity Church Corridor Environmental Assessment
Subject: Stakeholder Meeting
Meeting Date: 2:00 p.m., Monday, June 19, 2006
Location: City Centre, Meeting Room A, Hamilton
Prepared by: Nathalie Baudais
Attendees:
  John Demik
  Elaine Vin
  Adi Irani
  Anil Wijesooriya – ORC
  John Mackenzie – ORC
  Wendy Tuninga
  Angelo Paletta
  Christine Lee-Morrison – City of Hamilton
  Mohan Philip – City of Hamilton
  Leanne Ryan – City of Hamilton
  Harold Groen – City of Hamilton
  Emily Guthrow – City of Hamilton
  Ray Bacquie - iTRANS
  Nathalie Baudais - iTRANS
Distribution:
  Attendees
  Ali Abood
  Anthony Lombardi
  Joseph Maziarz
  Joe and Vittoria Dicienzo

<table>
<thead>
<tr>
<th>Item</th>
<th>Action</th>
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<tbody>
<tr>
<td>1.0</td>
<td>Roundtable introductions were done.</td>
</tr>
</tbody>
</table>
2.0 Christine Lee-Morrison provided study background information, including:
- A study context flow chart to explain how this study related to the ROPA9 Master Plan study, Special Policy Area ‘C’, Trinity Neighbourhood and the North Glanbrook Industrial Business Park (NGIBP) Master Plan study.
- The ROPA9 Master Plan has been approved by Council and the Notice of Study Completion has been issued for the Schedule B projects.
- The NGIBP Master Plan is nearing completion and will be presented to Council in July.
- Trinity Church Corridor Environmental Assessment for the Phase 3 and 4 is underway. Phase 1 and 2 were completed through the ROPA9 Master Plan for the section north of Rymal Road and through the NGIBP Master Plan for the section south of Rymal Road.

3.0 The design alternative alignments were discussed.
- Official Plans show the alignment as an extension to Trinity Church Road; however there was no predetermined alignment.
- The evaluation is considering several criteria, such as property impacts, natural environment, and many others.

4.0 The section north of Rymal Road has been identified as a shorter-term need to service the ROPA9 lands and to close Upper Mount Albion Road. The section south of Rymal Road will be coordinated with development.

5.0 Options 2 and 4:
- Present difficulties during the interim timeframe when the north section will be built but prior to the south section.
- An intersection with high turning volumes will be closely spaced to the Rymal Road / Trinity Church Road intersection.
- Option 4 also has more impacts to the natural environment.

6.0 Option 3:
- Concerns have been expressed from residents on Trinity Church Road for this alignment.
- The church and cemetery present a constraint.
- There are two listed heritage buildings along the alignment.
7.0 There are sight distance constraints in the area due to the back to back curves on Rymal Road and the curves on some of the proposed alignments.

8.0 A 90 km/h design speed is being used to design the alternatives. This correlates to a 70 or 80 km/h posted speed limit. Option 5 is the alternative that most closely meets the sight distance requirements.

9.0 The design will be for a 4-lane cross-section.

10.0 There are two options for right-of-way (ROW) designation.
   - 60 m ROW for a high end arterial road (as designated in the Region’s Official Plan); or
   - A 36 m ROW.
   - Mud Street west of Highway 20 (Upper Centennial Parkway) has a 60 m ROW.
   - The ROW will be recommended based on operational policies and design considerations.

11.0 Development in ROPA beyond the cap is contingent on either the required environmental assessments and respective capital budgets are finalized and funding is in place, or, until individual traffic impact studies have been approved.

12.0 A discussion was held regarding the provision of an east-west midblock collector in the lands north of Rymal Road. These have not been directly addressed, but access points could be allowed with a minimum spacing of 300 to 400 m. This would allow for one midblock between Highland Road and Rymal Road.

13.0 There are parcels on the mapping west of Glover and north of Twenty Road that do not exist. These lands are all owned by the same owner.

14.0 A discussion was held regarding the timing of the project in relation to Dartnell Road. This project does not take any priorities from Dartnell Road. They are both proceeding concurrently.

15.0 Some concerns were expressed regarding Option #2. The development block between Option 2 and Trinity Church Road has been approved for development. This will be confirmed with the Planning Department and overlain on the mapping.
<table>
<thead>
<tr>
<th></th>
<th>Concerns were expressed regarding Options 5 and 6. Creating development parcels will be difficult with these alternatives. Access to the lands would be difficult unless direct access could be provided. Consolidation of the accesses would be required where possible. A meeting will be scheduled with ORC to discuss further.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>17.0</td>
<td>The trunk servicing to Binbrook is located south on Glover Road, east on Twenty Road, south on Trinity Church Road and east on Golf Club Road.</td>
<td>iTRANS / City</td>
</tr>
<tr>
<td>18.0</td>
<td>Typical cross-sections are being prepared to illustrate what the road would look like.</td>
<td>iTRANS</td>
</tr>
<tr>
<td>19.0</td>
<td>Concerns were expressed regarding potential traffic calming measures. Plantings and non-intrusive measures could be investigated.</td>
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<tr>
<td>20.0</td>
<td>Roundabouts are being investigated at the intersection of Trinity Church Corridor and Rymal Road.</td>
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<tr>
<td>21.0</td>
<td>The traffic forecasts incorporated the growth projections for the entire City. The traffic forecasts also reflected the loss of development due to the Karst lands.</td>
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<tr>
<td>22.0</td>
<td>The Corridor south of Rymal Road is needed to service the NGIBP. The need for the section between Stone Church Road and Rymal Road will exist as soon as the Red Hill Valley Expressway ramps open in 2007. This section will be implemented as soon as the City can complete the detail design, property acquisition, funding.</td>
<td></td>
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<tr>
<td>23.0</td>
<td>A preferred alternative has not yet been identified but the westerly routes present several benefits. A request was made to modify Options 5 and 6 for the lands to be more usable. This will be examined. If the lands cannot be developed, there is the potential to create a carpool lot, but the lot will need to be provided with access.</td>
<td>iTRANS</td>
</tr>
<tr>
<td>24.0</td>
<td>A concern was raised regarding changes in land use designations to ensure land use compatibility.</td>
<td></td>
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<tr>
<td>25.0</td>
<td>The Red Hill Valley Open Space Strategy highlights a trail crossing which will need to be considered. The trail and midblock collector could potentially be coordinated. Discussions will be held with the City to determine the ability of relocating the trail to coordinate with a midblock collector.</td>
<td>iTRANS</td>
</tr>
<tr>
<td>26.0</td>
<td>The ORC has conducted Stage 1 and 2 archaeological studies and have identified 5 sites north of Highland Road and 6 sites south of Highland Road. They are proceeding with the Stage 3 and 4 assessments and are willing to share the studies with the City. They have completed their Category B Class EA.</td>
<td>ORC</td>
</tr>
<tr>
<td>27.0</td>
<td>A meeting will be scheduled with ORC and the City’s neighbourhood planners to discuss the Trinity Collector Road.</td>
<td></td>
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<tr>
<td>28.0</td>
<td>Concerns were expressed regarding the connection of Trinity Church Corridor and Dartnall Road to Nebo Road. This will be discussed with Gavin Norman who is the project manager for the NGIBP Master Plan. This connection will be addressed through that study and not the Trinity Church Corridor EA.</td>
<td>iTRANS / City</td>
</tr>
</tbody>
</table>
Meeting Minutes

Project: ROPA 9 Master Plan Class Environmental Assessment

Subject: Stakeholder Committee Meeting #3

Meeting Date: 6:00 p.m., Monday, October 2, 2006

Location: City of Hamilton - McMaster facility 50 Main Street E; former Court House

Prepared by: Nathalie Baudais

Attendees:
Julia Salvini – Smart Centres
Steve Spicer – Multi-Area Developments
Adi Irani – A.J. Clarke and Associates
Cory Giacinti – Urbex representing Silvestri Investments
Councillor David Mitchell – City of Hamilton Ward 11
Councillor Phil Bruckler – City of Hamilton Ward 9
Christine Lee-Morrison – City of Hamilton
Mary Lou Tanner – City of Hamilton (partial)
Mohan Philip – City of Hamilton
Peter De Iulio – City of Hamilton Planning
Vanessa Grupe – City of Hamilton Planning
Ray Bacquie – iTRANS
Liza Sheppard – iTRANS
Nathalie Baudais – iTRANS

Distribution:
Attendees
Gavin Norman – City of Hamilton Planning
Leanne Ryan – City of Hamilton Traffic
Stakeholder Members

<table>
<thead>
<tr>
<th>Item</th>
<th>Action</th>
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</thead>
<tbody>
<tr>
<td>1.0 Welcome &amp; Introductions</td>
<td></td>
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<tr>
<td>2.0 Project Update</td>
<td></td>
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</tbody>
</table>
2.1 CLM provided an update on the study. The notice of Study Completion for the Master Plan and Schedule ‘B’ projects (road closures and traffic calming monitoring for Second Road West and Upper Mount Albion Road) was circulated in July, and the Master Plan was filed on public record. No Part II Order requests were received. Currently proceeding with Phase 3 and 4 for the Schedule ‘C’ projects. The Phase 3 PIC for the Trinity Church Corridor was held on June 26, 2006. The Phase 3 PIC for ROPA and SPA ‘C’ will be held on October 12, and the Phase 3 PIC for Trinity Neighbourhood Collector will be held on October 18.

### 3.0 Trinity Neighbourhood Collector Design Alternatives and Recommendations

3.1 Six alternative alignment options were evaluated. Five of these were presented in the Master Plan document. A sixth alternative alignment located west of the City’s water reservoir site was also investigated, as a result of the public consultation process.

3.2 Two additional alternatives were also presented by the Hamilton Conservation Authority to minimize impacts to the Karst feeder area, but were screened out. One was screened out due to the geometrics of the alignment. The other was screened out because it would involve redesignation of a portion of Second Road West from a local road to a collector road.

3.3 Option 1 at Glenhollow Drive has been identified as the preliminary preferred option. It will be a 2 lane roadway with a 26.22 m ROW. This alignment as presented in the Master Plan, has been shifted further west to provide additional buffer to the Richdale Crescent residents.

3.4 The City of Hamilton has met with property owners who would be impacted by the alignments, including the preliminary preferred.

3.5 Additional studies will need to be completed prior to the construction of the collector road, as requested by the Conservation Authority. A stormwater management plan will need to be prepared and a monitoring program developed prior to construction. To more fully understand the 3 Karst features that could be impacted by the alignment, tracer studies and pumping tests will also be required.
3.6 The residents on Richdale Crescent will likely express concerns about the new collector road. It is the City’s intention to retain as much of the woodlot as possible, to maintain a buffer to the residents on Richdale Crescent. There may also be the potential for additional lotting on the east side of the collector road which would separate the residents from the new roadway.

3.7 A consultant has been hired to assess the woodlot in more detail to ensure that the natural environment has been completely assessed.

3.8 The residents on Glenhollow Drive may also express concerns about the connection of the new collector to Highland Road at Glenhollow Drive road. iTRANS to investigate how potential traffic impacts would be mitigated, and whether Glenhollow Drive would be a candidate for traffic management measures.

3.9 The land use review for Trinity Neighbourhood is underway and 3 high level land use concepts will be presented at the PIC on October 18. Another PIC will be held at the end of November for the land use review study.

3.10 A review of roundabouts at the Glenhollow Drive and Highland Road intersection was completed. The use of roundabouts was eliminated due to the need to purchase the northeast and northwest properties to construct the roundabout. However the City is reconsidering the possibility of a roundabout at this intersection.

4.0 **Trinity Church Corridor Update**

4.1 Option 2 (alignment east of existing Trinity Church Road) and Option 3 (alignment along existing Trinity Church Road) were screened out at the PIC held in June.

4.2 The 3 westerly alignments are still being evaluated. None of the alignments are ideal which makes the evaluation particularly difficult.

4.3 The construction of the alignment will be phased, the portion north of Rymal Road will be constructed first and the portion south of Rymal Road will be constructed as development proceeds.

4.4 Option 6 presents the ability to place the intersection on the outside of the Rymal Road curves; however, property is required on the south side to obtain adequate sightlines.
<table>
<thead>
<tr>
<th>4.5</th>
<th>Option 5 requires property on the south side of Rymal Road to obtain adequate sightlines.</th>
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</thead>
<tbody>
<tr>
<td>4.6</td>
<td>Option 4 is more centrally located and is on the tangent section between the Rymal Road curves. It provides adequate tangent sections. The alignment is not as constrained north of Rymal Road allowing for a midblock collector with more desirable geometry.</td>
</tr>
<tr>
<td>4.7</td>
<td>The evaluation to date is coming out towards Option 4 as the preferred but the alignment is still being refined to minimize sight distance impacts and property impacts.</td>
</tr>
<tr>
<td>4.8</td>
<td>Pritchard Road will ultimately be closed.</td>
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<tr>
<td>4.9</td>
<td>The spacing between the intersections at Trinity Church Road and the Trinity Church Corridor is also a concern. The type of traffic controls is still being considered.</td>
</tr>
<tr>
<td>4.10</td>
<td>A discussion regarding the existing Trinity Church Road was held. Although the need for the closure has not been identified through this process, it can be identified / approached through other means.</td>
</tr>
<tr>
<td>4.11</td>
<td>It was suggested that if Trinity Church Road is not closed, a roundabout may be a good option at it’s intersection with Rymal Road. There are some difficulties with a roundabout at this location, particularly with the properties on the north side and the listed buildings on the south side.</td>
</tr>
<tr>
<td>4.12</td>
<td>A question was raised as to whether the Trinity Church Corridor would become the back way to the airport? The preferred route (Dartmouth Road extension vs Trinity Church Corridor) should be expressed to the public since this would affect many rural properties. Nebo Road would be an attractive route since it affects less properties.</td>
</tr>
<tr>
<td>4.13</td>
<td>The cross-section of the Trinity Church Corridor south of Rymal Road was discussed. Concerns were expressed that a rural cross-section was shown, but that the City could come back to request urbanization at a later time.</td>
</tr>
<tr>
<td>4.14</td>
<td>The traffic controls at Trinity Church Corridor / Stone Church Road were discussed. Some type of traffic control will be needed as soon as the ramps open in 2007. These studies assessed the intersection as traffic signal controlled, but the City is still reviewing the draft Traffic Impact Study.</td>
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### 5.0 SPA ‘C’ Transportation Design Alternatives and Recommendations

<table>
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<tr>
<th>Section</th>
<th>Description</th>
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<tbody>
<tr>
<td>5.1</td>
<td>Stone Church Road will be widened to 4 lanes with a centre left turn lane and a ROW of 120 feet (36.58 m). Widening to the north, widening to the south and widening about the centreline were assessed. The preliminary preferred alternative is to widen about the centreline.</td>
</tr>
<tr>
<td>5.2</td>
<td>This option does result in property acquisition impacts on the townhouse development due to grading impacts. However, during detail design, the City will work closely with the property owners for ways to minimize impacts (retaining walls, etc.). The grading on the north side will be coordinated with development.</td>
</tr>
<tr>
<td>5.3</td>
<td>A discussion regarding the discrepancy of ROW ownership on the north side of Stone Church Road from the proposed truck entrance to the ramps was held. The surveyors for the developer have confirmed the developers’ ownership, but the work is not yet complete. A copy of the survey is to be provided to iTRANS.</td>
</tr>
<tr>
<td>5.4</td>
<td>The proposed outbound only truck entrance from the Heritage Green development was discussed. iTRANS has recommended that it be converted to a right-in only. The City is still reviewing this issue. Potential revisions could be made to the entrance to reduce truck off-tracking into the through lanes, and to ensure that the access is restricted to truck traffic only.</td>
</tr>
<tr>
<td>5.5</td>
<td>Winterberry Drive will be urbanized with sidewalks. The existing median will be impacted by the exclusive left turn lanes. A continuous right turn lane will be provided from eastbound on Mud Street to southbound on Winterberry Drive into the Heritage Green Development. The grading on the west side will be coordinated with development.</td>
</tr>
<tr>
<td>5.6</td>
<td>A discussion was held regarding the provision of an additional access to the Salvation Army Church. There is no existing access for southbound traffic due to the median. This has not been provided in the functional plans and no interest has been expressed by the Church for the provision of this access.</td>
</tr>
<tr>
<td>5.7</td>
<td>The Paramount Drive / Winterberry Drive intersection was discussed. No changes to the intersection are recommended. Concerns were expressed with only one through lane between Paramount and the Heritage Green Development entrance. It was discussed that the volumes do not warrant an additional through lane, but that iTRANS will investigate this issue further.</td>
</tr>
</tbody>
</table>
5.8 A question was posed regarding the sight triangles being provided at the Stone Church Road / Trinity Church Corridor intersection. iTRANS will confirm this number, but the sight triangle is a minimum of 15m x 15m.

5.9 The streetscaping shown on the cross-sections are conceptual only. The implementation of streetscaping, where feasible, will be identified during detail design.

6.0 ROPA 9 Transportation Design Alternatives and Recommendations

6.1 Three alternatives were examined for the widening of Rymal Road (widening to the north, widening to the south and widening about the centreline). Widening about the centreline has been identified as the preliminary preferred.

6.2 The widening will be taken to Glover Road, to account for the Trinity Church Corridor connection to Rymal Road.

6.3 Utility relocations were discussed. iTRANS will confirm the location of the poles that may have already been relocated as a result of new development, particularly in the area of the Wal-Mart site.

6.4 Property impacts were discussed. Dedication of property requirements for the widening from the developments on the south side of Rymal Road are a condition of the draft plans.

6.5 A design speed of 90 km/h was used. The widening will be for two lanes in each direction with a centre left turn lane.

6.6 Traffic controls along the corridor are still being resolved. Concerns were expressed regarding roundabouts due to the lack of breaks in traffic for those with driveways along the corridor.

6.7 iTRANS will confirm the grading required at the Smart Centres site since it could impact the landscape buffer.

6.8 Concerns regarding the Rymal Road widening to Dartnall Road were expressed. Since the Trinity Church Corridor could take a few years longer than the Rymal Road widening, drivers will be using the Dartnall Road interchange.

6.9 Bike lanes are not recommended along Rymal Road. Transit service accommodation will be resolved prior to the PIC.
6.10 The collector road (Terryberry Road) connection to Regional Road 56 (RR 56) was discussed. The design speed for RR 56 is currently 100 km/h with superelevation. There are several operations implications for the proposed collector road intersection on the curve.

6.11 The alternatives being evaluated for RR 56 include doing nothing, introducing a new alignment to provide a flatter curve and less superelevation, and maintaining the location of the existing curve while reducing the superelevation. Maintaining the location of the curve while reducing the superelevation is the preliminary preferred alternative but would result in a reduction of the design speed, and possibly the posted speed, which could impact driver behaviour. The posted speed limit may need to be reduced from 80 km/h to 70 km/h.

6.12 RR 56 will be urbanized on the west side with a sidewalk. A concern were expressed regarding the provision of a sidewalk along RR 56 since pedestrians will likely prefer to use Swayze Road.

6.13 As the area evolves and develops, traffic signals would become warranted at the RR 56 / New Collector Road intersection. Traffic controls at the intersection with the new collector are still being assessed. A traffic signal or roundabout would alert drivers to a change in the roadway environment.

6.14 Drivers could also be alerted of a change in the roadway environment through signage and potentially pavement markings.

6.15 It was suggested that storm sewers on the west side of RR 56 may become an issue if minimum cover requirements cannot be met.

6.16 It was suggested that there is flexibility on the location of the collector road. iTRANS will investigate if a relocation of the collector would improve the conditions.

7.0 Timing

7.1 The public information centres will be held in the middle of October. The Environmental Study Reports (ESRs) are scheduled to be finalized by the end of the year. Detail design is estimated to commence immediately after successful completion and filing of the ESRs.

7.2 Construction of the Rymal widening will likely begin in 2008.
7.3 Start of construction of the Trinity Church Corridor will likely take longer than Rymal Road due to property acquisition. Construction may therefore begin in 2009 / 2010.

7.4 Start of construction of the Trinity Neighbourhood Collector will likely also take longer than Rymal Road due to the property acquisition, and the additional studies required for the Karst. Construction may therefore begin in 2009.

7.5 The timing for RR 56 is tied to the collector road development and to the development in Binbrook. The City will check with the design department to confirm when the improvements to RR 56 will be implemented.  

8.0 Other Items

8.1 The evaluation tables and plans will be released at the Public Information Centres. The PIC material will be made available on the project website after the meetings are held.

7.0 Next Steps

7.1 ▪ The stakeholder input will be considered and incorporated into the PIC material.  
▪ The public information centres will be held.  
▪ The preferred options will be confirmed.  
▪ The Environmental Study Report(s) will be prepared and filed (study completion notice will be circulated).  
▪ Detail design will begin.
February 14, 2007

Ms. Jo-Ann E.C. Greene, Director
Six Nations Lands and Resources
2498 Chiefwood Road, PO Box 5000
Ohsweken, Ontario N0A 1M0

RE: Rymal Road Planning Area (ROPA9 Lands) Class Environmental Assessment Studies

Dear Ms. Greene:

Further to our meeting with your representative on June 6, 2006, please find attached the final Stage 1 Archaeological Assessment report for the Rymal Road Planning Area Class EA Studies prepared by Archaeological Services Inc.

Should you have any questions, please contact Mohan Philip of this office at 905.546.2424 ext. 3438.

Yours truly,

Christine Lee-Morrison, MCIP, RPP
Acting Manager, Strategic & Environmental Planning

Attach.
June 15, 2006

Jo-Anne E.C. Greene, Director
Six Nations Lands & Resources
PO Box 5000, Chiefwood Road
Ohsweken, Ontario
N0A 1M0

Dear Ms. Greene:

Re: Rymal Road Planning Area (“ROPA 9” Lands) Master Plan – Class Environmental Assessment (EA)

Thank you for your continuing interest in this project. As you know, the City of Hamilton has completed the Master Plan Class Environmental Assessment (EA) to assess infrastructure needs for the Rymal Road Planning Area. The study area includes lands located on the south side of Rymal Road East (Highway No. 53), east of Trinity Church Road, west of Regional Road 56, and north of the hydro corridor, called the ROPA 9 lands, and lands in an area bounded by Winterberry Drive to the east, Paramount Drive to the south, the new Red Hill Valley / Mud Street interchange to the west, and the Lincoln Alexander Parkway-Mud Street West to the north, called Special Policy Area ‘C’.

This study has been undertaken in accordance with Section A.2.7. Master Plans as defined in the Municipal Engineers Association, Municipal Class Environmental Assessment document (June 2000), and will satisfy Phase 1 and 2 of the planning and design process for transportation projects. A Class EA Master Plan documenting the planning process undertaken and conclusions reached will be filed on public record for a minimum of 30 calendar days in accordance with the municipal Class EA. The “Review Period” will begin on June 16, 2006 and end on July 18, 2006.

Further to our recent meeting with Paul General and Kate Cave, from your office, at which time we provided an information package, including the Stage 1 Archaeological Assessment undertaken for this study, we are now enclosing a copy of the complete Rymal Road Planning Area (“ROPA 9”) Master Plan Class Environmental Assessment Study Phase 1 and 2. Final copies of the Archaeological Assessment and Natural Heritage Report are included in the document as Appendix D.1 and D.3, respectively. Copies of the Notice of Completion and minutes from our June 6, 2006 meeting are also attached for your information. As per Mr. General’s request, we are pleased to continue to share additional information with you as it becomes available.
Should you have any questions regarding this matter or require additional information, please feel free to call me at 905-546-2424 extension 6390.

Sincerely,

Christine Lee-Morrison, MCIP, RPP
Senior Project Manager,
Strategic and Environmental Planning

/clm

enclosures

cc Liza Sheppard, iTRANS Consulting Inc.
# Meeting Minutes

**Project:** Rymal Road Planning Area Master Plan (ROPA 9) Class Environmental Assessment  
**Subject:** Meeting with Six Nations  
**Meeting Date:** 2:00 p.m., Tuesday, June 6, 2006  
**Location:** Hamilton City Centre, Room C  
**Prepared by:** Nathalie Baudais  
**Attendees:**  
- Paul General – Six Nations  
- Kate Cave – Six Nations  
- Christine Lee-Morrison – City of Hamilton  
- Mohan Philip – City of Hamilton  
- Leanne Ryan – City of Hamilton  
- Harold Groen – City of Hamilton  
- Ray Bacquie – iTRANS  
- Nathalie Baudais – iTRANS  

**Distribution:**  
Attendees  
Jo-Ann Greene  

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1.0 Welcome &amp; Introductions</td>
<td></td>
</tr>
<tr>
<td>1.1 Roundtable introductions were made.</td>
<td></td>
</tr>
<tr>
<td>2.0 ROPA 9 Master Plan Project Summary</td>
<td>Info</td>
</tr>
<tr>
<td>2.1 CLM provide project background information. ROPA Secondary Plan was approved by Council and the OMB. The Master Plan approach under the Municipal Class EA process is being undertaken.</td>
<td></td>
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<tr>
<td>She also outlined the public consultation that has taken place to date:</td>
<td></td>
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<tr>
<td>- PIC #1 October 3, 2005</td>
<td></td>
</tr>
<tr>
<td>- PIC #2 January 26, 2006</td>
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<tr>
<td>- Special Policy Area ‘C’ (SPA ‘C’) Newsletter April 21, 2006</td>
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</tbody>
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1 of 4
### 3.0 ROPA 9 Master Plan Study Recommended Solution

3.1 RB provided an overview of the recommended solutions. The following solutions will be assessed in additional detail as part of the Phase 3 and 4 studies:

- Widen Rymal Road from Trinity Church Road to Regional Road 56. Widen Regional Road 56 from Rymal Road to approximately 900 m to the south.
- A new road link from Stone Church Road / Red Hill Creek Expressway ramps to Rymal Road (on an alignment to be determined). Implement road closure on Upper Mount Albion Road.
- A new collector road in the Trinity Neighbourhood (Karst feature limits many of the alignment options). Implement road closure on Second Road West north of Gatestone Drive.
- Improvements needed to service Special Policy Area ‘C’, including the widening of Stone Church Road to 4 lanes from the RHCE Ramp to Upper Mount Albion Road, exclusive turn lanes, and traffic controls (signals or roundabout) at Winterberry Drive/Site access.

Design alternatives and mitigation measures will be studied as part of the Phase 3 and 4 studies.

### 4.0 Issues of Concern

4.1 There are areas in City of Hamilton where Six Nations resource users still exercise their Aboriginal and treaty rights.

- Impacts to wildlife in the area could affect the Six Nations hunting and fishing rights.
- Species at risk and potential wildlife barriers are other areas of concern.
- No species at risk have been identified in the initial studies, but a natural heritage subconsultant is part of the project team.
- Six Nations have no guidelines for design alternatives since individual projects have such varying impacts.
4.2 Archaeological Sites

- A Stage 1 Archaeological Assessment has been completed. The project team is in the process of confirming any additional work that should be completed for the Phase 3 and 4 studies.
- For the Red Hill Project, Six Nations provided a monitor during construction. This could potentially be done again, but the scheduling would need to be coordinated.
- Mitigation plans if a site is discovered during construction vary depending on the resource that is found.

4.3 Eramosa Karst

- The project team has been working closely with the Conservation Authority and will continue to do so throughout the project.

4.4 Red Hill Creek and Twenty Mile Creek watersheds

- Storm water management studies will be conducted for the road projects as part of the detailed Phase 3 and 4 studies and detail design. Storm water management studies for the development areas will be conducted as part of the development proposals.
- Subwatershed Management Studies are being conducted for Davis Creek and Hannon Creek. Any findings from these studies will be incorporated into the Phase 3 and 4 EAs.

4.5 Roundabouts versus Traffic Signals

- The Six Nations Director (Jo-Ann Greene) had expressed concerns regarding the use of roundabouts in her comment form for Special Policy Area ‘C’.
- It is City’s policy to include a review of roundabouts at locations where signals are being investigated.
- The developer is analyzing the use of roundabouts and will provide the results to the City.
- Roundabouts may be an option but may or may not be recommended, but they will be included in the evaluation.
### 5.0 Next Steps

5.1 CLM provided a brief recap of the next steps for the process:
- Complete Master Plan
- Present Master Plan to council in June
- File Master Plan report and issue notice of study completion for Schedule B projects
- Phase 3 and 4 will then be carried forward with additional public consultation
- The Public Information Centre for the Trinity Church Corridor Phase 3 and 4 study will be held on Monday, June 26 at 6:30pm. It will be open house format.
- The Public Information Centres for Special Policy Area ‘C’, Rymal Road, Regional Road 56 and the Trinity Collector will be held in the fall.
- Phase 3 and 4 Environmental Study Reports will then be presented to Council, filed, and notices of study completions will be issued.
- Public Information Centre and Study Completion notices will continue to be sent to Six Nations.

### 6.0 Other Items

- A copy of the PIC materials and the Stage 1 Archaeological Assessment was provided to PG at the meeting.

- Six Nations would appreciate receiving the project related reports as they come in, rather than reviewing them as appended to the Master Plan / Environmental Study Report documents.

- Jo-Ann Greene will continue to be the main contact at Six Nations.
3. Do you have any comments regarding the transportation recommendations for Special Policy Area 'C'? Do you agree with the recommendations? Please indicate why or why not.

Under Traffic Controls, I do not agree with the use of roundabouts. From the volume of traffic, existing and future, traffic signals would be the best solution.

4. Do you have any other comments regarding the information provided in the Newsletter?

I would appreciate getting more information in the Newsletter. It would be better if all pertinent information was provided to facilitate a fully informed decision.

Contact Information (Optional)
Name: Jo-Ann E. C. Greene, Director
Address: Six Nations Lands & Resources P.O. Box 5000 Ohsweken, ON NOA1M0
Phone Number: 519-753-0665 ext. 12 Email: j.greenesixnations.ca

Would you like to be added to our ROPA 9 Lands mailing list?
☐ YES ☐ NO

To fulfill Environmental Assessment Act requirements, we will maintain your comments on file for use during this Study and may include them in Study documentation. With the exception of personal information, all comments received will become part of the public record. Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act.
November 2, 2005

Christine Lee-Morrison, MCIP, RPP
Senior Project Manager
Economic Development
Capital Planning and Implementation
Public Works Department

City of Hamilton
320 – 77 James Street North
Hamilton, ON L8R 2K3

Dear Ms. Lee-Morrison:

Re: Rymal Road Planning Area (ROPA 9 Lands) Master Plan
    Class Environmental Assessment

I attended the Public Information Centre (PIC) held on October 3, 2005, on the Rymal Road Planning Area (ROPA 9 Lands) Master Plan Class Environmental Assessment.

While I have no comment at this time on the proposed study as presented at the PIC, there are several issues that need to be addressed for Six Nations of the Grand River (Six Nations) to reach a decision.

- There are areas within the City of Hamilton where Six Nations resource users still exercise their Aboriginal and treaty rights.
- The study is within two kilometres of a substantial number of known archaeological sites.
- There is a significant natural site in the Eramosa Karst area.
- The study area does have streams that feed into the Red Hill Creek and Twenty Mile Creek watersheds.

Six Nations would like to see included in the study at the time that the preferred alternative options are presented at the next PIC mitigation and measures to address the above concerns and issues. Further, we would like copies of the reports generated for this project, especially the archaeological reports and to be included in any notices of future meetings.

Please forward communications to Six Nations Lands and Resources, 2498 Chiefswood Road, P.O. Box 5000, Ohsweken, ON N0A 1M0.

Sincerely,

[Signature]

Jo Ann E.C. Greene, Director
Six Nations Lands & Resources
Fyi....and to add to our tracking of comments.

Thanks

-----Original Message-----
From: 
Sent: Tuesday, October 10, 2006 11:29 AM
To: Rymal Road Planning Area
CC: 
Subject: Rymal Road Planning Area

As I will be out of town on Oct 12, 2006 could you please add me to the study mailing list. As a Trinity Church Road resident I am very concerned how the increased traffic situation is to handled going forward. If the road change plans are available I would be quite interested in reviewing these as well.

E-Mail= 
Mailing= 

Regards

Ready for the world's first international mobile film festival celebrating the creative potential of today's youth? Check out Mobile Jam Fest for your a chance to WIN $10,000! www.mobilejamfest.com
From: [Redacted]
Sent: Friday, October 13, 2006 9:37 AM
To: [Redacted]
Cc: [Redacted]
Subject: Trinity Church Corridor Preliminary Preferred Alternative
Attachments: Trinity-4-PIC-Plan.JPG

Hello [Redacted],

As requested by Mr. Freeman yesterday and in your phone message this morning, I have attached a digital copy of the preliminary preferred alternative for the Trinity Church Corridor, as presented at the public information centre yesterday. Please let me know if you have any problems with the file.

Regards,

[Redacted]
From: [Redacted]
Sent: Friday, October 13, 2006 12:46 PM
To: [Redacted]
Subject: RE: Trinity Church Corridor preliminary preferred alternative

Thanks

The file is fine. I will talk with Kathy Menyes before I proceed with preparing any comments.

Cheers,

[Redacted]

From: [Redacted]
Sent: Friday, October 13, 2006 9:43 AM
To: [Redacted]
Cc: [Redacted]
Subject: Trinity Church Corridor preliminary preferred alternative

Hello [Redacted]

As requested at last night's Public Information Centre for the Trinity Church Corridor Class Environmental Assessment, I have attached a digital copy of the preliminary preferred alternative. Please let me know if you have any problems with the file.

Regards,
Nathalie Baudais

From: Nathalie Baudais
Sent: Friday, October 13, 2006 9:37 AM
To: 
Cc: Lee-Morrison, Christine; Ray Bacquie
Subject: Trinity Church Corridor Preliminary Preferred Alternative
Attachments: Trinity-4-PIC-Plan.JPG

Hello [Name],

As requested by [Name] yesterday and in your phone message this morning, I have attached a digital copy of the preliminary preferred alternative for the Trinity Church Corridor, as presented at the public information centre yesterday. Please let me know if you have any problems with the file.

Regards,
Nathalie

Nathalie Baudais, P.Eng., PE
Transportation Planner
ITRANS Consulting Inc.
100 York Boulevard, Suite 300
Richmond Hill, ON L4B 1J8
Ph. (905) 882-4100 ext 5282
Fax. (905) 882-1557
nbaudais@itranconsulting.com
Hello [Name]

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Regards,
Nathalie

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Trinity Neighbourhood Collector and Trinity Church Corridor
Phase 3 and 4 Class Environmental Assessments
Public Information Centre (PIC)
October 18th, 2006

The City of Hamilton has completed the Master Plan Class Environmental Assessment (EA) process to assess infrastructure needs for the Rymal Road Planning Area. The study area includes lands located on the south side of Rymal Road (RR 53), and north of the hydro corridor, called the ROPA 9 lands, and lands in an area bounded by Winterberry Drive to the east, Paramount Drive – Stone Church Road to the south, the new Red Hill Valley / Mud Street interchange to the west, and the Lincoln Alexander Parkway - Mud Street West to the north, called Special Policy Area "C".

The Master Plan Class EA recommends several transportation solutions and the City is now undertaking further Class EA studies, including the Trinity Neighbourhood Collector and the Trinity Church Corridor Class EAs, to identify and evaluate alternative designs for the recommended planning solutions.

(visit www.hamilton.ca/rop9a for further information.)

YOUR COMMENTS
(Please Print)

Do you agree with the evaluation of alternative designs and the preliminary preferred alternative for:

- A new collector road within the Trinity Neighbourhood?

Yes [ ] No [x]

Comments:

________________________________________________________________________
________________________________________________________________________
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- A new road link from Stone Church Road / Red Hill Valley Parkway ramps to Rymal Road (i.e. Trinity Church Corridor Alternative 4)?

Yes [ ] No [x]

Comments:

ORIGINAL OPTION IS MY PREFERRED ROUTE WITH ALIGNMENT ON PRITCHARD RD. I FEEL IT WILL BE LESS DISTURBING TO THE AREA AND THE INTERSECTION WILL NOT BE ON THE CURVE. THE DISTANCE BETWEEN THE 3 OPTIONS ARE ALL THE SAME AS FAR AS HAVING A IMPACT ON THE AREA.
Do you have a preference for the location of the closure of Second Road West, as shown on the plan?

Option 1  □  Option 2  □

Comments:

Do you have any general questions, concerns or comments regarding the information presented?

Comments and information regarding this study are being collected to assist the City of Hamilton in completing Phase 3 and 4 of the studies. Comments will be maintained on file for use in finalizing the study and may be included in study documentation. With the exception of personal information, all comments will become part of the public record.

Please drop these comments in the box provided or forward them by November 1st, 2006 to either:

Christine Lee-Morrison, MCIP, RPP  OR  Liza Sheppard, P.Eng.
Senior Project Manager,  Senior Project Manager,
Capital Planning & Implementation,  iTRANS Consulting Inc.
Public Works Department  100 York Boulevard, Suite 300
City of Hamilton  Richmond Hill, ON L4B 1J8
320-77 James St. N.  Phone: 905-882-4100, ext. 5232
Hamilton, ON L8R 2K3  Fax: 905-882-1557
Phone: 905-546-2424 ext. 6390  Email: lsheppard@itransconsulting.com
Fax: 905-546-4435
Email: cleemorr@hamilton.ca

Please add me to the mailing list:
Name: ____________________________  OR  Name: ____________________________
Address: ____________________________  OR  Address: ____________________________
Phone: ____________________________  OR  Phone: ____________________________
Email: ____________________________  OR  Email: ____________________________
Trinity Neighbourhood Collector and Trinity Church Corridor
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YOUR COMMENTS
(Please Print)

Do you agree with the evaluation of alternative designs and the preliminary preferred alternative for:

- A new collector road within the Trinity Neighbourhood?

Yes ☐ No ☑

Comments:

RESIDENTS COMPLAIN, SO YOU HAVE TO CLOSE AND ROADS.
RESIDENTS ON HIGHLAND COMPLAIN, BUT YOU STILL WANT TO PUT A COLLECTOR ROAD INTO HIGHLAND, CREATING ENORMOUS TRAFFIC INTO HIGHLAND.
WHY CAN'T YOU LEAVE EVERYTHING ALONE AND JUST MAKE ONE HIGHWAY THAT GOES FROM RR 53 - TRINITY CHURCH TO THE LINK - THIS MAKES SENSE.
SAVING TAXPAYER MILLIONS OF DOLLARS AND HEADACHES. DON'T CREATE MORE PROBLEMS BY PUTTING AN EXTRA HWAY GOING THROUGH THE BACK OF PEOPLES PROPERTY.

- A new road link from Stone Church Road / Red Hill Valley Parkway ramps to Rymal Road (i.e. Trinity Church Corridor Alternative 4)?

Yes ☐ No ☐

Comments:

__________________________________________
__________________________________________
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Do you have a preference for the location of the closure of Second Road West, as shown on the plan?

Option 1  □  Option 2  □

Comments:
____________________________________________________________________________________
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Do you have any general questions, concerns or comments regarding the information presented?
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Public Works Department
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320-77 James St. N.
Hamilton, ON L8R 2K3
Phone: 905-546-2424 ext. 6390
Fax: 905-546-4435
Email: cleemorr@hamilton.ca

____________________________________________________________________________________

Please add me to the mailing list:
Name:______________________________________________________________________________
Address:___________________________________________________________________________
Phone: ___________________________ Email: ___________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________
Trinity Neighbourhood Collector and Trinity Church Corridor
Phase 3 and 4 Class Environmental Assessments
Public Information Centre (PIC)
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(visit www.hamilton.ca/ropas for further information.)

YOUR COMMENTS
(Please Print)

Do you agree with the evaluation of alternative designs and the preliminary preferred alternative for:

• A new collector road within the Trinity Neighbourhood?

Yes [ ] No [ ]
Comments:

• A new road link from Stone Church Road / Red Hill Valley Parkway ramps to Rymal Road (i.e. Trinity Church Corridor Alternative 4)?

Yes [ ] No [ ]
Comments:
Do you have a preference for the location of the closure of Second Road West, as shown on the plan?

Option 1 \[\checkmark\]  Option 2  \[

Comments:

Do you have any general questions, concerns or comments regarding the information presented?

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OR

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Senior Project Manager,
TRANSC Consulting Inc.
100 York Boulevard, Suite 300
Richmond Hill, ON L4B 1J8
Phone: 905-882-4100, ext. 3232
Fax: 905-882-1557
Email: lsheppard@transconsulting.com

Please add me to the mailing list:
Name:  
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YOUR COMMENTS
(Please Print)

Do you agree with the evaluation of alternative designs and the preliminary preferred alternative for:

- A new collector road within the Trinity Neighbourhood?

Yes ☐ No ☐

Comments:


- A new road link from Stone Church Road / Red Hill Valley Parkway ramps to Rymal Road (i.e. Trinity Church Corridor Alternative 4)?

Yes ☑ No ☐

Comments:
Do you have a preference for the location of the closure of Second Road West, as shown on the plan?

Option 1    ☐    Option 2    ☐

Comments:

N/A

Do you have any general questions, concerns or comments regarding the information presented?

How is the extension south of Royal Road dealing with the possible connection to the mid-Beaconsider?

Within the next 2 years, digger politicians in Cornwall and John Tory proposed that if digger support and construction of Beaconsfield and the extension will proceed with a connection to 410/407 via this road. This concept was suggested at John Tory session at Sherry Creek community centre 2 years ago.

Comments and information regarding this study are being collected to assist the City of Hamilton in completing Phase 3 and 4 of the studies. Comments will be maintained on file for use in finalizing the study and may be included in study documentation. With the exception of personal information, all comments will become part of the public record.

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YOUR COMMENTS
(Please Print)

Do you agree with the evaluation of alternative designs and the preliminary preferred alternative for:

• A new collector road within the Trinity Neighbourhood?

Yes ☑ No ☐

Comments:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

• A new road link from Stone Church Road / Red Hill Valley Parkway ramps to Rymal Road (i.e. Trinity Church Corridor Alternative 4)?

Yes ☑ No ☐

Comments:

A NEW ROAD SHOULD CUT DOWN ON THE VOLUME OF CARS GOING PAST RESIDENTIAL NEIGHBOURHOODS. MORE EFFORTS SHOULD BE MADE TO CUT DOWN ON THE HIGH SPEEDS AND DANGEROUS PASSING ALONG HIGHLAND RD.
Do you have a preference for the location of the closure of Second Road West, as shown on the plan?

Option 1 ☐ Option 2 ☐

Comments:

CLOSURE OF SECOND RD IS A WASTE OF TAXPAYER MONEY, SINCE AN ALTERNATE ROAD IS BEING BUILT TO DEAL WITH THE NORTH/SOUTH TRAFFIC.

Do you have any general questions, concerns or comments regarding the information presented?

HIGHLAND ROAD SHOULD BE DIVIDED TO PROVIDE A CENTRE TURN LANE. IT HAS BECOME VERY VERY DIFFICULT TO SAFELY TURN INTO OR OUT OF LOCAL DRIVEWAYS. THE SINGLE EXISTING LANES ARE WIDE AND ENCOURAGE DANGEROUS PASSING AND EXTREMELY SPEEDS. THERE HAVE BEEN SEVERAL COLLISIONS AND CLOSE-CALLS.

Comments and information regarding this study are being collected to assist the City of Hamilton in completing Phase 3 and 4 of the studies. Comments will be maintained on file for use in finalizing the study and may be included in study documentation. With the exception of personal information, all comments will become part of the public record.

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Please add me to the mailing list:

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Address: ____________________________
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Phase 3 and 4 Class Environmental Assessments
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(visit www.hamilton.ca/ropas for further information.)

YOUR COMMENTS
(Please Print)

Do you agree with the evaluation of alternative designs and the preliminary preferred alternative for:
• A new collector road within the Trinity Neighbourhood?
   Yes ☐ No ☑
   Comments:
   ___________________________________________________________
   ___________________________________________________________
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   ___________________________________________________________
   ___________________________________________________________

• A new road link from Stone Church Road / Red Hill Valley Parkway ramps to Rymal Road (i.e. Trinity Church Corridor Alternative 4)?
   Yes ☐ No ☑
   Comments:
   ___________________________________________________________
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   ___________________________________________________________
   ___________________________________________________________
Do you have a preference for the location of the closure of Second Road West, as shown on the plan?

Option 1  ☐  Option 2  ☐

Comments:  

Do you have any general questions, concerns or comments regarding the information presented?

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Please add me to the mailing list:
Name: 
Address: 
Phone:  ____________________  Email:  ____________________
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YOUR COMMENTS
(Please Print)

Do you agree with the evaluation of alternative designs and the preliminary preferred alternative for:

• A new collector road within the Trinity Neighbourhood?

Yes ☐ No ☑

Comments: WITH ALL THE EXISTING ROADS, I DON'T SEE A NEED FOR A NEW ROUTE DOWN TO HIGHAND RYPAL 2 THE 'LINK'. JUST CLOSE OFF 2ND ROAD WEST AND ROUTE THE TRAFFIC FROM THE NEW DEVELOPMENT TO THE PROPOSED TRINITY CHURCH CORRIDOR ROUTE.

• A new road link from Stone Church Road / Red Hill Valley Parkway ramps to Rymal Road (i.e. Trinity Church Corridor Alternative 4)?

Yes ☑ No ☐

Comments:
Do you have a preference for the location of the closure of Second Road West, as shown on the plan?

Option 1 ☐ Option 2 ☐

Comments:

CLOSE SECOND ROAD WEST AT HIGHWAY 53

Do you have any general questions, concerns or comments regarding the information presented?

My biggest concern is increased traffic on Winterberry Rd where my kids go to school. Drivers will use Winterberry as a shortcut to the link or Stone Church Rd.

Comments and information regarding this study are being collected to assist the City of Hamilton in completing Phase 3 and 4 of the studies. Comments will be maintained on file for use in finalizing the study and may be included in study documentation. With the exception of personal information, all comments will become part of the public record.

Please drop these comments in the box provided or forward them by November 1st, 2006 to either:

Christine Lee-Morrison, MCIP, RFP
Senior Project Manager,
Capital Planning & Implementation,
Public Works Department
City of Hamilton
320-77 James St. N.
Hamilton, ON L8R 2K3
Phone: 905-546-2424 ext. 6390
Fax: 905-546-4435
Email: cleemorr@hamilton.ca

OR

Liza Sheppard, P.Eng.
Senior Project Manager,
ITRANS Consulting Inc.
100 York Boulevard, Suite 300
Richmond Hill, ON L4B 1J8
Phone: 905-882-4100, ext. 5232
Fax: 905-882-1557
Email: lsheppard@itransconsulting.com

Please add me to the mailing list:
Name: ____________________________
Address: __________________________
Phone: ___________________________ Email: ___________________________
Rymal Road Planning Area (ROPA 9) Master Plan
Phase 3 and 4 Class Environmental Assessment
Public Information Centre (PIC)
October 12th, 2006

The City of Hamilton has completed the Master Plan Class Environmental Assessment (EA) process to assess infrastructure needs for the Rymal Road Planning Area. The study area includes lands located on the south side of Rymal Road (RR 53), and north of the hydro corridor, called the ROPA 9 lands, and lands in an area bounded by Winterberry Drive to the east, Paramount Drive - Stone Church Road to the south, the new Red Hill Valley / Mud Street interchange to the west, and the Lincoln Alexander Parkway - Mud Street West to the north, called Special Policy Area "C".

The Master Plan Class EA recommends several transportation solutions and the City is now undertaking further Class EA studies to identify and evaluate alternative designs for the recommended planning solutions.

(visit www.hamilton.ca/ropa9 for further information.)

YOUR COMMENTS
(Please Print)

Do you agree with the evaluation of alternative designs and the preliminary preferred alternative for:

- The widening of Rymal Road from Trinity Church Road to Regional Road 56?

  Yes ☐ No ☑

  Comments:
  
  MAKES MORE TRAFFIC
  SLOW DOWN RYMAL ROAD

- The widening of Regional Road 56 from Rymal Road to approximately 900 m to the south?

  Yes ☑ No ☐

  Comments:

- The widening of Stone Church Road from the Red Hill Valley Parkway (RHVP) ramps to Upper Mount Albion Road, and related Special Policy Area “C” improvements?

  Yes ☑ No ☐

  Comments:
A new road link from Stone Church Road / RHVP ramps to Rymal Road (i.e. Trinity Church Corridor Alternative 4)?

Yes ☐ No ☐

Comments:

Do you have any general questions, concerns or comments regarding the boards presented?

Slow Down Traffic.

& Light at Trinity & Rymal

& Rymal & Fletchers Rd.

Comments and information regarding this study are being collected to assist the City of Hamilton in completing Phases 3 and 4 of the study. Comments will be maintained on file for use in finalizing the study and may be included in study documentation. With the exception of personal information, all comments will become part of the public record.

Please drop these comments in the box provided or forward them by October 26, 2006 to either:

Christine Lee-Morrison, MCIP, RPP
Senior Project Manager,
Capital Planning & Implementation,
Public Works Department
City of Hamilton
320-77 James St. N.
Hamilton, ON L8R 2K3
Phone: 905-546-2424 ext. 6390
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Phone: 905-882-4100, ext. 5232
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Email: lsheppard@itransconsulting.com

Please add me to the mailing list:
Name:
Address:
Phone:
Email:
Rymal Road Planning Area (ROPA 9) Master Plan  
Phase 3 and 4 Class Environmental Assessment  
Public Information Centre (PIC)  
October 12th, 2006

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The Master Plan Class EA recommends several transportation solutions and the City is now undertaking further Class EA studies to identify and evaluate alternative designs for the recommended planning solutions.

(visit www.hamilton.ca/ropa9 for further information.)

YOUR COMMENTS  
(Please Print)

Do you agree with the evaluation of alternative designs and the preliminary preferred alternative for:

- The widening of Rymal Road from Trinity Church Road to Regional Road 56?
  
  Yes ☑ No. ☐
  Comments:
  __________________________________________________________
  __________________________________________________________
  __________________________________________________________
  __________________________________________________________

- The widening of Regional Road 56 from Rymal Road to approximately 900 m to the south?

  Yes ☐ No ☑
  Comments:
  __________________________________________________________
  __________________________________________________________
  __________________________________________________________
  __________________________________________________________

- The widening of Stone Church Road from the Red Hill Valley Parkway (RHVP) ramps to Upper Mount Albion Road, and related Special Policy Area “C” improvements?

  Yes ☐ No ☑
  Comments:
  __________________________________________________________
  __________________________________________________________
  __________________________________________________________
A new road link from Stone Church Road / RHVP ramps to Rymal Road (i.e. Trinity Church Corridor Alternative 4)?

Yes [ ] No [X]

Comments:

Do you have any general questions, concerns or comments regarding the boards presented?

MORE TRAFFIC LIGHTS ALONG Hwy 53 TO REDUCE TRAFFIC FROM SIDE STREETS

Comments and information regarding this study are being collected to assist the City of Hamilton in completing Phases 3 and 4 of the study. Comments will be maintained on file for use in finalizing the study and may be included in study documentation. With the exception of personal information, all comments will become part of the public record.

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320-77 James St. N.
Hamilton, ON L8R 2K3
Phone: 905-546-2424 ext. 6390
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OR

Liza Sheppard, P.Eng.
Senior Project Manager,
iTRANS Consulting Inc.
100 York Boulevard, Suite 300
Richmond Hill, ON L4B 1J8
Phone: 905-882-4100, ext. 5212
Fax: 905-882-1557
Email: lsheppard@itransconsulting.com

Please add me to the mailing list:
Name: ____________________________
Address: __________________________
Phone: ____________________________
Email: ____________________________
The City of Hamilton has completed the Master Plan Class Environmental Assessment (EA) process to assess infrastructure needs for the Rymal Road Planning Area. The study area includes lands located on the south side of Rymal Road (RR 53), and north of the hydro corridor, called the ROPA 9 lands, and lands in an area bounded by Winterberry Drive to the east, Paramount Drive - Stone Church Road to the south, the new Red Hill Valley/Mud Street interchange to the west, and the Lincoln Alexander Parkway - Mud Street West to the north, called Special Policy Area 'C'.

The Master Plan Class EA recommends several transportation solutions and the City is now undertaking further Class EA studies to identify and evaluate alternative designs for the recommended planning solutions.

(visit [www.hamilton.ca/ropas](http://www.hamilton.ca/ropas) for further information.)

**YOUR COMMENTS**

*(Please Print)*

Do you agree with the evaluation of alternative designs and the preliminary preferred alternative for:

- The widening of Rymal Road from Trinity Church Road to Regional Road 56?
  
  - Yes ☑ No ☐
  
  Comments: 
  
  [Some text crossed out: not found here.]

- The widening of Regional Road 56 from Rymal Road to approximately 900 m to the south?
  
  - Yes ☑ No ☐
  
  Comments: excellent

- The widening of Stone Church Road from the Red Hill Valley Parkway (RHVP) ramps to Upper Mount Albion Road, and related Special Policy Area “C” improvements?
  
  - Yes ☑ No ☐
  
  Comments: excellent
• A new road link from Stone Church Road / RHVP ramps to Rymer Road (i.e. Trinity Church Corridor Alternative 4)?

Yes ☐ No ☐
Comments:

Comments and information regarding this study are being collected to assist the City of Hamilton in completing Phases 3 and 4 of the study. Comments will be maintained on file for use in finalizing the study and may be included in study documentation. With the exception of personal information, all comments will become part of the public record.

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Email: lsheppard@itransconsulting.com

Please add me to the mailing list:
Name: 
Address: 
Phone: 
Email: 
Rymal Road Planning Area (ROPA 9) Master Plan
Phase 3 and 4 Class Environmental Assessment
Public Information Centre (PIC)
October 12th, 2006

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The Master Plan Class EA recommends several transportation solutions and the City is now undertaking further Class EA studies to identify and evaluate alternative designs for the recommended planning solutions.

(visit www.hamilton.ca/ropas for further information.)

YOUR COMMENTS
(Please Print)

Do you agree with the evaluation of alternative designs and the preliminary preferred alternative for:

- The widening of Rymal Road from Trinity Church Road to Regional Road 56?

  Yes ☑  No ☐

  Comments:
  [Your comments here]

- The widening of Regional Road 56 from Rymal Road to approximately 900 m to the south?

  Yes ☑  No ☐

  Comments:
  [Your comments here]

- The widening of Stone Church Road from the Red Hill Valley Parkway (RHVP) ramps to Upper Mount Albion Road, and related Special Policy Area "C" improvements?

  Yes ☑  No ☐

  Comments:
  [Your comments here]
- A new road link from Stone Church Road / RHVP ramps to Rymal Road (i.e. Trinity Church Corridor Alternative 4)?
  Yes [ ] No [x]

Comments:

I feel that the best alternative is the one directly down the road rather than the one chosen now - disrupts and requires new Hamilton / Barrie carrier.

Do you have any general questions, concerns or comments regarding the boards presented?

Comments and information regarding this study are being collected to assist the City of Hamilton in completing Phases 3 and 4 of the study. Comments will be maintained on file for use in finalizing the study and may be included in study documentation. With the exception of personal information, all comments will become part of the public record.

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320-77 James St. N.
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Senior Project Manager,
ITRANS Consulting Inc.
100 York Boulevard, Suite 300
Richmond Hill, ON L4B 1J8
Phone: 905-882-4100, ext. 5232
Fax: 905-882-1557
Email: lsheppard@itransconsulting.com

Please add me to the mailing list:
Name:
Address:
Phone: [ ] Email: [ ]
Rymal Road Planning Area (ROPA 9) Master Plan
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October 12th, 2006

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The Master Plan Class EA recommends several transportation solutions and the City is now undertaking further Class EA studies to identify and evaluate alternative designs for the recommended planning solutions.

(visit www.hamilton.ca/rop9 for further information.)

YOUR COMMENTS
(Please Print)

Do you agree with the evaluation of alternative designs and the preliminary preferred alternative for:

- The widening of Rymal Road from Trinity Church Road to Regional Road 56?

  Yes □ No □
  Comments:

  I Approve the design I seen from RR 56 to the N/S road between Trinity Rd. and Ritchard Rd. (See Suggestions and Comments)

- The widening of Regional Road 56 from Rymal Road to approximately 900 m to the south?

  Yes □ No □
  Comments:

- The widening of Stone Church Road from the Red Hill Valley Parkway (RHVP) ramps to Upper Mount Albion Road, and related Special Policy Area “C” improvements?

  Yes □ No □
  Comments:
- A new road link from Stone Church Road / RHVP ramps to Rymal Road (i.e. Trinity Church Corridor Alternative 4)?
  Yes ☑ No ☐
  Comments:

  From Stone Church Rd to pass Rymal Rd between Trinity Church Rd. and Baychard Rd.

Do you have any general questions, concerns or comments regarding the boards presented?

I would think a new E/W Rd. from RR 36 to the Glenbrook Industrial Area, and connect into the N/S express way would be more acceptable by the majority of commuters.

From both North and South.

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Email: cleemorm@hamilton.ca

OR

Liza Sheppard, P.Eng.
Senior Project Manager,
iTRANS Consulting Inc.
100 York Boulevard, Suite 300
Richmond Hill, ON L4B 1J8
Phone: 905-882-4100, ext. 5232
Fax: 905-882-1557
Email: lsheppard@itransconsulting.com

Please add me to the mailing list:

Name: __________________________
Address: ________________________
Phone: __________________________ Email: __________________________
Rymal Road Planning Area (ROPA 9) Master Plan
Phase 3 and 4 Class Environmental Assessment
Public Information Centre (PIC)
October 12th, 2006

The City of Hamilton has completed the Master Plan Class Environmental Assessment (EA) process to assess infrastructure needs for the Rymal Road Planning Area. The study area includes lands located on the south side of Rymal Road (RR 59), and north of the hydro corridor, called the ROPA 9 lands, and lands in an area bounded by Winterberry Drive to the east, Paramount Drive - Stone Church Road to the south, the new Red Hill Valley / Mud Street interchange to the west, and the Lincoln Alexander Parkway - Mud Street West to the north, called Special Policy Area "C".

The Master Plan Class EA recommends several transportation solutions and the City is now undertaking further Class EA studies to identify and evaluate alternative designs for the recommended planning solutions.

(visit www.hamilton.ca/ropae9 for further information.)

YOUR COMMENTS

(Please Print)

Do you agree with the evaluation of alternative designs and the preliminary preferred alternative for:

- The widening of Rymal Road from Trinity Church Road to Regional Road 56?

  Yes [X]  No [ ]

  Comments:

  [I THINK THE WIDENING OF RYMAL RD TO THE SOUTH WOULD ELIMINATE PART OF THE CURVE THAT EXISTS BETWEEN MITCHELL RD & TRINITY CHURCH RD AND HAVE LESS IMPACT ON HOUSES & BUSINESSES]

- The widening of Regional Road 56 from Rymal Road to approximately 900 m to the south?

  Yes [X]  No [ ]

  Comments:

  __________________________________________________________

- The widening of Stone Church Road from the Red Hill Valley Parkway (RHVP) ramps to Upper Mount Albion Road, and related Special Policy Area “C” improvements?

  Yes [X]  No [ ]

  Comments: STONE CHURCH SHOULD BE WIDENED FROM MITCHELL RD TO UPPER MOUNT ALBION ROAD WITH...
A new road link from Stone Church Road / RHVP ramps to Rymal Road (i.e. Trinity Church Corridor Alternative 4)?

Yes ☐ No ☐

Comments:

**CONTAMINATED SOIL MAY BE PRESENT ON LAND BEHIND 1131-1145 ELMER ROAD WHERE HUGE QUANTITIES OF FILL HAVE BEEN DUMPED OVER THE YEARS.**

Do you have any general questions, concerns or comments regarding the boards presented?

**THE CLOSER TO Pritchard Rd THE BETTER FOR MISSING HOUSES.**

**A STOP LIGHT AT AYMARD & UPPER MOUNT AIRLION RD - DAKOTA BOULEVARD IS BADLY NEEDED.**

Comments and information regarding this study are being collected to assist the City of Hamilton in completing Phases 3 and 4 of the study. Comments will be maintained on file for use in finalizing the study and may be included in study documentation. With the exception of personal information, all comments will become part of the public record.

Please drop these comments in the box provided or forward them by October 26, 2006 to either:

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Senior Project Manager,
Capital Planning & Implementation,
Public Works Department
City of Hamilton
320-77 James St. N.
Hamilton, ON L8R 2K3
Phone: 905-546-2424 ext. 6390
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OR

Liza Sheppard, P.Eng.
Senior Project Manager,
ITRANS Consulting Inc.
100 York Boulevard, Suite 300
Richmond Hill, ON L8B 1R8
Phone: 905-882-4100, ext. 5232
Fax: 905-882-1557
Email: lsheppard@itransconsulting.com

Please add me to the mailing list:

Name: [Redacted]
Address: [Redacted]
Phone: [Redacted] Email: [Redacted]
October 18th, 2006

Dear [Name],

Thank you for attending the Public Information Centre regarding the Rymal Road Planning Area projects. Enclosed is a copy of the Trinity Neighbourhood Collector boards as you requested for the PIC that you were unable to attend on October 18th, 2006.

If you have any further questions or concerns regarding the ROPA9, Trinity Church Corridor or the Trinity Neighbourhood Collector Class Environmental Assessment Studies, feel free to contact either of the following pertaining to your questions or visit the project web site (www.hamilton.ca/rops9):

Christine Lee-Morrison, MCIP, RPP
Senior Project Manager,
Capital Planning & Implementation,
Public Works Department
City of Hamilton
320-77 James St. N.
Hamilton, ON L8R 2K3
Phone: 905-546-2424 ext. 6390
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Richmond Hill, ON L4B 1J8
Phone: 905-882-4100, ext. 5232
Fax: 905-882-1557
Email: lsheppard@itranconsulting.com

Sincerely,

[Signature]
Christine Lee-Morrison

Cc: Liza Sheppard, iTRANS
    Nathalie Baudias, iTRANS
Lee-Morrison, Christine [cleemorr@hamilton.ca]

Wednesday, October 18, 2006 3:45 PM

Subject: Re: Rymal Road Planning Area

Dear [Name],

I have added your name to our mailing list. Information displayed at the October 12, 2006 Public Information Centre is now available on the project web site at www.hamilton.ca/ropas9. Please feel free to review the information on the web site and call me if you have any questions.

Sincerely,

Christine Lee-Morrison, MCIP, RPP
Senior Project Manager, Environmental Planning Capital Planning and Implementation Public Works Department City of Hamilton
20-77 James St. N.
Hamilton, Ontario, L8R 2K3
el: 905-546-2424 extension 6390
ax: 905-546-4355
cleemorr@hamilton.ca

-----Original Message-----
From: [Name] [Name] [Name] [Name] [Name]
Sent: Tuesday, October 10, 2006 11:29 AM
To: Lee-Morrison, Christine
Cc: lsheppard@itransconsulting.com
Subject: Rymal Road Planning Area

Christine: As I will be out of town on Oct 12, 2006 could you please add me to the study mailing list. As a Trinity Church Road resident I am very concerned how the increased traffic situation is to handled going forward. If the road change plans are available I would be quite interested in reviewing these as well.

-Mail=

-failing=

Regards

Ready for the world’s first international mobile film festival celebrating the creative potential of today’s youth? Check out Mobile Jam Fest for your chance to WIN $10,000! www.mobilejamfest.com
Dear [Name],

Thank you for your interest in this project. Your name will be added to our mailing lists. In answer to your questions, please be advised of the following:

Regarding the Rymal Road widening, design alternatives are currently being developed by our staff and consultant team as part of the Phase 3 and 4 Class EA process. (The Master Plan documented the Phase 1 and 2 Class EA process.) You will have an opportunity to review the design alternatives and the evaluation of design alternatives at an upcoming Public Information Centre (PIC, tentatively scheduled for October 12, 2006). Notices will be going out shortly to all parties on our mailing list, and you will be sent the details at that time. If you are unable to attend the Open House, the display material will be posted on the project website following the event (www.hamilton.ca/ropa9), or feel free to contact me.

Exhibit 7-2 illustrates the preliminary alternatives for the proposed new road link from Stone Church Road / RHVE ramps to Rymal Road (i.e. the Trinity Church Corridor), which was one of the conclusions of the Phase 1 and 2 Master Plan. A Phase 3 and 4 Class EA PIC was held on June 26, 2006 regarding this proposed link. Since the June PIC, the preliminary preferred alignment has been refined and will also be on display at the above noted October 2006 PIC.

The new collector road referred to in relation to RR56 does not correspond to the above noted Exhibit 7-2. The location of the new collector road proposed to connect with RR56 south of Rymal Rd. was approved as part of the Secondary Planning process for the Rymal Road Planning area (see Section 1.2.1 Regional Official Plan Amendment No. 9 and the Rymal Road Secondary Plan of the Master Plan). The location of the collector road to connect with RR56 is illustrated in figure 3.5 Proposed Accesses & Collector Roads of the Master Plan. The Master Plan does not discuss alternative locations for this collector road. Alternative designs for the widening of RR56 and collector road intersection will also be on display at the October PIC noted above.

The need for a new collector road within the Trinity Neighbourhood (e.g. connecting Rymal Rd/Second Rd. W. at Gatestone Dr to Highland Rd. W.) was another conclusion of the Phase 1 and 2 Master Plan (see Master Plan Exhibit 8-1). This project is also subject to a Phase 3 and 4 Class EA process and design alternatives are being developed by our staff and consultant team. The next PIC for this project is tentatively scheduled for October 18, 2006. You will also receive a copy of the notice for this Open House. Likewise, information will be posted to the project website following the Open House.

I trust this provides clarification to your questions. Please feel free to call or e-mail should you require any further clarification.

Sincerely,

Christine Lee-Morrison, MCIP, RPP
Senior Project Manager, Environmental Planning Capital Planning and Implementation Public Works Department City of Hamilton
320-77 James St. N.
Hamilton, Ontario, L8R 2K3
tel: 905-546-2424 extension 6390
fax: 905-546-4435
cleemorr@hamilton.ca
Hello Christine,

My name is [redacted] and we represent [redacted], who is the owner and operator of the [redacted]. I have looked into the ROPA9 EA document on the website. May I have the following questions:

- Regarding the Rymal Road widening, would we have any opportunity to review the functional design drawings?

- Page 102 of the report stated that Regional Road 56 is to be widened to the south at a signalized intersection with a new collector road within ROPA9. Does the EA report have any discussion about this new collector road, or does it relate to the alignment options in exhibit 7-2?

- There was a figure produced by iTRANS showing collector road alignment options from Gatestone Dr to Glenhollow Dr/Cityview Cr/Winterberry Dr. Where does it stand in the current EA process?

Thank you very much.

Regards,
[redacted]

Please feel free to contact me if you have any questions or require further assistance.

**************************************************************************************************
****
*********************************************************
This e-mail is confidential and intended solely for the use of the addressee(s) listed above. Please notify the sender and delete all copies of this message together with any attached files if you have obtained this message in error. [redacted] is not responsible for edited or reproduced versions of this digital data.
Subject: RE: RPOA9 EA master plan document

We can provide copies of the Master Plan on CD at a cost of $5. Alternately, we should have the Master Plan document posted to the website in about one week's time.

Please let me know your preference.

Thanks

Christine Lee-Morrison, MCIP, RPP
Senior Project Manager, Environmental Planning
Capital Planning and Implementation
Public Works Department
City of Hamilton
320-77 James St. N.
Hamilton, Ontario, L8R 2K3
tel: 905-546-2424 extension 6390
fax: 905-546-4435
cleemorr@hamilton.ca

-----Original Message-----
From: [redacted]
Sent: Thursday, June 22, 2006 1:29 PM
To: Lee-Morrison, Christine
Subject: RPOA9 EA master plan document

Hi Christine, thank you for the notice of completion. May I ask if the EA master plan available in digital format, i.e. pdf?

Thanks

Regards,

Please feel free to contact me if you have any questions or require further assistance.

This e-mail is confidential and intended solely for the use of the addressee(s) listed above. Please notify the sender and delete all copies of this message together with any attached files if you have obtained this message in error. We are not responsible for edited or reproduced versions of this digital data.
October 25, 2006

In reference to the Closure of Pritchard Road at Rymal Road (Cul-de-sac).

Dear [Name],

Due to the fact that the new road is located quite some distance away from Pritchard Road, in our opinion we do not see the reasoning of changing Pritchard Road to a cul-de-sac. We are very concerned about the adverse affects this will have on the value and use of our corner lot.

If you can relieve us of the concern of the above mentioned closure, we have no further objection to this project.

However, we would like this letter to be formally registered in opposition of the proposed change to Pritchard Road at the Rymal Road intersection. Please keep us informed on any subsequent meetings, discussions or events with this situation.

Lastly, we would like to mention that we are highly in favour of the proposed roundabouts and would like to congratulate the city engineers for this foresight. We have seen them used extensively in Europe and very rarely do you see an accident or traffic jam. We are including an article from the Hamilton Spectator (dated Oct 17/06) touting the advantages of using them.

We respectfully await your reply.

Sincerely,
I have two observations re. the North Claremont Industrial Park's road design/choices you planners have made in your draft plan.

First, there is the extension of Twenty Rd. east to Trinity Church Rd. This is the most contentious part of the plan because it opens up the I.P. to a residential area. The I.P. must be self-contained! The fact that Dandell Rd. is to be extended, that another new road will be brought south into the park from the area of Pritchard Rd. and the widening of Rymal Rd. are more than sufficient to create wide access a exiting of the traffic from the park. Therefore, insisting upon an established residential community is a flawed strategy in a plan of this nature.

Secondly, there is the matter of the new road that would come south from the direction of Pritchard Rd. The farther west that it goes in paralleling Trinity Church Rd,
the better. Not only would it more quickly give access to the central part of the park (the blue-lined choice on your maps), but it would also increase its distance away from the residences on both the east and west sides of Trinity Church Rd. Objections that this road's alignment with Rynal Rd. as it intersects the latter is not insurmountable with a feasible modification.

Thus, if you revise these two design conflicts thoughtfully, the city, its planners and we citizens can all achieve our objectives as a community now e for the future.

Yours truly,
Transmittal

To: [Redacted]
Cc: Christine Lee-Morrison – City of Hamilton
From: Nathalie Baudais
Re: Trinity Church Arterial Corridor
Public Information Centre Displays

Date: November 22, 2006

The following items are delivered to you by mail.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Date</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hard copy set of public information centre displays</td>
<td>Issued October 12 and 18, 2006</td>
<td>1</td>
</tr>
</tbody>
</table>

Comments:

Dear [Redacted],

I hope that you are enjoying your trip. As you requested at the end of August, I am forwarding you a package of the public information centre materials for the Trinity Church Arterial Corridor.

If you have any further questions or concerns, please feel free to contact us or visit the project website at www.hamilton.ca/ropa9.

Regards,

Nathalie Baudais
Transmittal

To: [Redacted]

Cc: Christine Lee-Morrison – City of Hamilton

From: Nathalie Baudrais

Date: November 24, 2006

Re: Trinity Church Arterial Corridor
Class Environmental Assessment
Preferred Alternative Drawing

The following items are delivered to you by courier.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Date</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hard copy of the preferred alternative alignment drawing as presented at the Public Information Centre on October 12 and October 18, 2006.</td>
<td>Issued October 12, 2006</td>
<td>1</td>
</tr>
</tbody>
</table>

Comments:
As requested, I have sent an 11x17 of the preferred alternative for the Trinity Church Arterial Corridor. Please let me know if you have any additional questions or comments.
December 7, 2006

Ms. Nathalie Baudeis
iTrans Consulting Inc.
100 York Blvd., Suite 300
Richmond Hill, ON
L4B 1J8 Kanada

Re: File 2.3 - Project Nr. 3349

Dear Nathalie:

There is no getting away from it: I have to pay you my compliments. You even deserve praise on several scores.

Yes, you said in our last telephone conversation that you wanted to mail me Public Information Centre Displays in regard to the Trinity Church Arterial Corridor. Other people may also say that, but then fall down on the job. Not you, my dear lady. You not only lived up to your promise, but you found me out 7000 km from home. In the process, you gave me much joy and satisfaction.

Thank you, Nathalie.

Then, there is the project of the Corridor, per se. I consider yours an excellent choice. Indeed, Option 4 is optimal and very much to my liking.

Now comes my next question: when will construction commence and when will it reach the nether regions south of Rymal Road?

I have owned my property 49 (!) years and I have seen the impotent City of Hamilton agonize over the RED HILL VALLEY PARKWAY more than 40 years. Will it be speedier in the Corridor?

You may find it in your heart to deliver yourself of a commentary by telephone _______ when I shall be back in Mississauga in mid January 2007.

In the meantime, I wish you satisfaction, success, and gratification from your fine work. And, of course, also some days of rest and pleasure over the Christmas holidays.

Sincerely regards,
Nathalie Baudais

From: Philip, Mohan [mphilip@hamilton.ca]
Sent: Thursday, January 25, 2007 3:26 PM
To: [Redacted]
Cc: Lee-Morrison, Christine; Nathalie Baudais.
Subject: FW: Trinity Church Road

Hi [Redacted]

The preferred design alternative for the alignment of the new Trinity Church Corridor is Option #4, which is the alignment crossing Rymal Road somewhat midway between Pritchad and existing Trinity Church Road. This is the same one which was recommended during the PIC on October 12, 2006. The final ESR is under preparation and the Notice of Completion is expected within the next two months.

The Hannon Creek Study is nearing completion. Once comments are received from the agencies a PIC will be held to present the Subwatershed Plan to the public.

I hope this is helpful. Please contact us if you have more questions.

Mohan Philip
For Christine Lee-Morrison

-----Original Message-----
From: Lee-Morrison, Christine
Sent: Thursday, January 25, 2007 8:35 AM
To: Philip, Mohan
Subject: FW: Trinity Church Road

Christine Lee-Morrison, MCIP, RPP
Acting Manager, Strategic and Environmental Planning
Capital Planning and Implementation
Public Works Department
City of Hamilton
320-77 James St. N.
Hamilton, Ontario, L8R 2K3
tel: 905-546-2424 extension 6390
fax: 905-546-4435
cleemorr@hamilton.ca

-----Original Message-----
From: [Redacted]
Sent: Wednesday, January 24, 2007 5:08 PM
To: Lee-Morrison, Christine
Subject: Trinity Church Road

Hi Christine,
I was wondering if you can give me an update on the Trinity Church corridor EA. We have just purchased the lands and are anxious to submit applications for zoning and plan of subdivision. We have two unknowns at this time; the alignment of the new Trinity Church corridor at Rymal Road although the short list of alternatives eliminates any impact on these new lands; and the Hannon Creek sub-watershed study which we understand is almost complete.

We appreciate any update that you can give us.

Thanks
Hi [Name],

Thank you for your interest in this project. The New Trinity Church alignment is finalized. It's the one crossing midway between existing Trinity Church Road and Pritchard Road which is marked as option 4 in the display material of PIC 2&3 held in October, 2006. The filing of the ESR (phase 3 & 4) is expected within the next two months.

Regarding the Upper Mount Albion, it is planned to be closed when the New Trinity Church Road is in place. The appropriate EA process (Phase 1&2) for this was completed and approved in July 2006. The complete EA process and report are posted on the ROPA9 project website.

Regarding the New Trinity Collector Road, the alignment that connects 2nd Road West to Highland Road at Glenhollow Drive is the final chosen one. The phase 3&4 ESR report for this study is planned to be filed within the next two months.

Hope this helps you. Please contact me if you have further questions.

Mohan Philip
City of Hamilton
Ext: 3438

-----Original Message-----
From: Lee-Morrison, Christine
Sent: Tuesday, February 06, 2007 3:35 PM
To: Philip, Mohan
Subject: FW: ROPA 9 - Roadways

Christine Lee-Morrison; MCIP, RPP
Acting Manager, Strategic and Environmental Planning
Capital Planning and Implementation
Public Works Department
City of Hamilton
320-77 James St. N.
Hamilton, Ontario, L8R 2K3
tel: 905-546-2424 extension 6390
tax: 905-546-4435
cleemorr@hamilton.ca

-----Original Message-----
Hi Christine,

Our company is doing some work for the [Redacted] and I had a few questions that hopefully you can answer for me. After visiting the website on ROPA9, I am still unclear if a new road alignment has been chosen to link the RHV expressway to Rymal. I think the proposal was leaning toward just west of Trinity Church road but can you clarify for me if there has been anything more concrete on road alignment in the area. Is the city planning on closing off Upper Mount Albion at Rymal Rd.? I have also printed off an aerial map of Collector Road Potential Alignments connecting Highland Rd. to 2nd Road West which may or may not affect [Redacted]. Do you have any further input on these collector roads or is this still in its early phases? Any feedback would be greatly appreciated.

Thanks,
Hi [Name],

Thanks for your continued interest in this project. The phase 3&4 of the New Trinity Church Road EA process is nearing completion. We have finalized the road alignment and I would like to advise you that as per the final Road Layout Plans, the realigned Twenty Road is not connected to the existing Trinity Church Road. It will end at the New Trinity Church Road.

Please contact me if you have further questions.

Thanks

Mohan Philip
City of Hamilton
Ext: 3438

-----Original Message-----
From: Lee-Morrison, Christine
Sent: Tuesday, February 06, 2007 3:42 PM
To: Philip, Mohan
Subject: FW: Twenty Rd. extention to Trinity Church Rd.

Christine Lee-Morrison, MCIP, RPP
Acting Manager, Strategic and Environmental Planning
Capital Planning and Implementation
Public Works Department
City of Hamilton
320-77 James St. N.
Hamilton, Ontario, L8R 2K3
tel: 905-546-2424 extension 6390
fax: 905-546-4435
cleemorr@hamilton.ca

-----Original Message-----
From: [Name] [mailto:]
Sent: Tuesday, October 31, 2006 10:22 AM
To: Lee-Morrison, Christine
Subject: Twenty Rd. extention to Trinity Church Rd.

Hello Christine;

I had a discussion with [Name] last week about the Trinity Neighbourhood Collector Road Class Environmental Assessment Study and our concerns about the extention of Twenty Road being extend over to Trinity Church Rd. I understand he discussed this subject with you and our concerns.
We living on Trinity Church Rd. do not want any traffic connected with the business park (North Glenbrook Prestigious Industrial Business Park) to enter onto Trinity Church Rd. The traffic on our road is already bad and has been increasing over the last few years and it will be intolerable if traffic from the NGPIBP links unto our road.

We on Trinity Church Rd. have discussed the new plans for the business park extensively and the Twenty Rd. extension to our road is the only part of the city plans with which we cannot agree. You know we have made this evident verbally to your study group on various occasions and I hope it will be considered in the final study and plans.

talked about some changes to be discussed in the future about changes to be proposed between Rymal Rd. and the hydro lines to do with roads coming west from the new housing survey.

Please keep us informed. Thank you.
Nathalie Baudais

From: Philip, Mohan [mphilip@hamilton.ca]
Sent: Friday, February 09, 2007 4:49 PM
To: [masked]
Cc: Nathalie Baudais; Lee-Morrison, Christine; Groen, Harold
Subject: FW: Trinity Church Arterial Corridor

Hi,

The Phase 3 & 4 of the EA process for the New Trinity Church Corridor is nearing completion. The study confirmed that the North-South alignment option 4 is to be the final recommended one. This is the same one recommended during the PIC on October 12th. This option is the North-South alignment of New Trinity Church Corridor crossing Rymal Road between Pritchard Road and existing Trinity Church Road. The final Study Report is expected to be filed within the next two months. The City's plan is to construct the portion of the new road north of Rymal as early as possible. The portion south of Rymal is planned to be constructed in the long term as development proceeds. However, we would like to advise you that there will be impact on [masked], even if it is the north portion construction only. This is because a roundabout is recommended at the intersection of New Trinity Church Road and Rymal Road. Please note that the City has taken into consideration all possible measures to minimize the impact on private properties.

We will contact you for further discussion once the area of the property going to be affected is finalized and assessed. The evaluation of the property is based on the fair market value at the time of purchase. We want to stress that property purchase will likely not occur prior to the final approval of the Environmental Study Report.

In the meantime, if you have further questions please contact me by email or by telephone.

Thanks
Mohan Philip
Tel: 905 546 2424 ext.3438

-----Original Message-----
From: Lee-Morrison, Christine
Sent: Tuesday, February 06, 2007 3:34 PM
To: Philip, Mohan
Subject: FW: Trinity Church Arterial Corridor

Christine Lee-Morrison, MCIP, RPP.
Acting Manager, Strategic and Environmental Planning
Capital Planning and Implementation
Public Works Department
City of Hamilton
320-77 James St. N.
Hamilton, Ontario, L8R 2K3
tel: 905-546-2424 extension 6390
tax: 905-546-4435
cleemorr@hamilton.ca

-----Original Message-----
From: [masked]
Sent: Tuesday, November 07, 2006 9:58 AM

2/12/2007
To: Lee-Morrison, Christine  
Subject: Trinity Church Arterial Corridor

Hello Ms. Lee-Morrison,

My father is [REDACTED], and he owns the property at [REDACTED] Rymal Road. This is the property that

What is the current status of the Class Environmental Assessment Study? Has the location of the arterial corridor been decided upon yet?

My father has asked me to express on his behalf his concerns with regards to this project. He asks that if possible, the road not be built upon his land, as he doesn't believe the city would pay a fair price if they required his land for this arterial corridor.

If the decision has already been made, how does the city evaluate the value of the property?

Thank you.

Best regards,
28 March, 2007

Reference: 25T85002 Greenbriar Industrial Park
& 25T85003 Greenleaf Industrial Park

Dear [Name],

Re: Trinity Church Corridor - Municipal Class Environmental Assessment Study Phases 3 & 4

This is to update you on Phases 3 and 4 of the Trinity Church Corridor Municipal Class Environmental Assessment process which is now nearing completion.

As you are aware, two series of Public Information Centres (PIC's) were held during Phases 3 & 4 of the Class EA process. The first PIC was held on June 26, 2006 and the second one on October 12 and 18, 2006. In the first PIC six design options were presented for the alignment of the New Trinity Church Corridor. Three of these six design options were carried forward for further evaluation. At the last PIC, the three options were again presented and the preferred or recommended option was shown. The recommended option (Option 4) was selected based on the comprehensive evaluation criteria and the input from the Public. Our further analysis confirmed Option 4 as being the recommended option. This option is the north-south alignment of New Trinity Church Road crossing Rymal Road between Pritchard Road and existing Trinity Church Road. It is also confirmed that roundabouts are recommended along the New Trinity Church Road at Highland Road, proposed Mid Block Road, Rymal Road and the realigned Twenty Road. The City’s intention is to construct the north portion of the New Trinity Church Road (i.e. north of Rymal Road) as early as possible.

The study recommends that the construction of the New Trinity Church Road portion south of Rymal Road should be carried out in the longer term as development proceeds. We would like to advise you that the recommended alignment may impact
your property/subdivision plans. If so, the subdivision plans will have to be revised to accommodate the proposed New Trinity Church Road right of way. The details of the road connection to the Dartnel Road extension will be determined at a later stage.

The Notice of Completion of the Class EA is expected to be issued within the next 2 months after which a 30 day review period will be available for review by public. There is opportunity during this review period for you to comment or raise any concerns and the procedure for this will be outlined in the Notice of Completion.

The City of Hamilton is committed to providing you with full information on this project. Should you have any questions, please do not hesitate to contact Mohan Philip of this office at (905) 546-2424 Ext 3438.

Yours truly,

[Signature]

Christine Lee-Morrison, MCIP, RPP
Acting Manager, Strategic and Environmental Planning

cc: Councillor B. Clark, Ward 9
    Councillor D. Mitchell, Ward 11
    Peter De Iulio, Development Planning
    Bill Parkas, Real Estate
    Guy Paparella, Business Development
    Andrew Head, CP&I
    Brenda Khos, Community Planning and Design
    Nathalie Baudais, iTRANS Consulting
28 March, 2007

Dear Sir/Madam:

Re: Trinity Church Corridor - Municipal Class Environmental Assessment Study Phases 3 & 4

This is to update you on Phases 3 and 4 of the Trinity Church Corridor Municipal Class Environmental Assessment process which is now nearing completion.

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Yours truly,

[Signature]

Christine Lee-Morrison, MCIP, RPP
Acting Manager, Strategic and Environmental Planning

cc:  Councillor B. Clark, Ward 9
      Councillor D. Mitchell, Ward 11
      Peter De Iulio, Development Planning
      Bill Farkas, Real Estate
      Guy Paparella, Business Development
      Andrew Head, CP&I
      Brenda Khes, Community Planning and Design
      Nathalie Baudais, iTRANS Consulting
28 March, 2007

Re: Trinity Church Corridor - Municipal Class Environmental Assessment Study Phases 3 & 4

Dear [Name],

This is to update you on Phases 3 and 4 of the Trinity Church Corridor Municipal Class Environmental Assessment process which is now nearing completion.

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We would like to advise you that the recommended alignment will impact your property (i.e., [Address]). The extent of the impact will be determined upon resolution of certain technical items and the completion of the Environmental Study Report. Please contact the undersigned if you would like to meet to further discuss the land acquisition process.

We must stress that property purchase will likely not occur prior to the final approval of the Environmental Study Report and council approvals are finalized. The Notice of Completion of the Class EA is expected to be issued within the next 2 months after which a 30 day review period will be available for review by public. There is
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project. Should you have any questions, please do not hesitate to contact Mohan
Philip of this office at (905) 546-2424 Ext 3438.

Yours truly,

[Signature]

Christine Lee-Morrison, MCIP, RPP
Acting Manager, Strategic and Environmental Planning

cc: Councillor, B. Clark, Ward 9
    Councillor, D. Mitchell, Ward 11
    Bill Farkas, Real Estate
    Darlene Cole, Real Estate
    Brenda Khes, Community Planning and Design
    Nathalie Baudais, iTRANS Consulting
28 March, 2007

Re: Trinity Church Corridor - Municipal Class Environmental Assessment Study Phases 3 & 4

Dear [Redacted]:

This is to update you on Phases 3 and 4 of the Trinity Church Corridor Municipal Class Environmental Assessment process which is now nearing completion.

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Yours truly,

[Signature]

Christine Lee-Morrison, MCIP, RPP
Acting Manager, Strategic and Environmental Planning

cc:  Councillor, B. Clark, Ward 9
     Councillor, D. Mitchell, Ward 11
     Bill Parkas, Real Estate
     Darlene Cole, Real Estate
     Brenda Khos, Community Planning and Design
     Nathalie Baudais, iTRANS Consulting
28 March, 2007

Re:  Trinity Church Corridor - Municipal Class Environmental Assessment Study Phases 3 & 4

Dear Mr. & Mrs. Huybens:

This is to update you on Phases 3 and 4 of the Trinity Church Corridor Municipal Class Environmental Assessment process which is now nearing completion.

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Yours truly,

[Signature]

Christine Lee-Morrison, MCIP, RPP
Acting Manager, Strategic and Environmental Planning

cc: Councillor, B. Clark, Ward 9
    Councillor, D. Mitchell, Ward 11
    Bill Farkas, Real Estate
    Darlene Cole, Real Estate
    Brenda Khes, Community Planning and Design
    Nathalie Baudais, iTRANS Consulting
28 March, 2007

Re: Trinity Church Corridor - Municipal Class Environmental Assessment Study Phases 3 & 4

Dear [Redacted]

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Philip of this office at (905) 546-2424 Ext 3438.

Yours truly,

[Signature]

Christine Lee-Morrison, MCIP, RPP
Acting Manager, Strategic and Environmental Planning

cc: Councillor, B. Clark, Ward 9
    Councillor, D. Mitchell, Ward 11
    Bill Farkas, Real Estate
    Darlene Cole, Real Estate
    Brenda Khes, Community Planning and Design
    Nathalie Baudais, iTRANS Consulting
28 March, 2007

Re: Trinity Church Corridor - Municipal Class Environmental Assessment Study Phases 3 & 4

Dear [Redacted]

This is to update you on Phases 3 and 4 of the Trinity Church Corridor Municipal Class Environmental Assessment process which is now nearing completion.

As you are aware, two series of Public Information Centres (PIC's) were held during Phases 3 & 4 of the Class EA process. The first PIC was held on June 28, 2006 and the second one on October 12 and 18, 2006. In the first PIC six design options were presented for the alignment of the proposed Trinity Church Corridor. Three of these six design options were carried forward for further evaluation. At the last PIC, the three options were again presented and the preferred or recommended option was shown. The recommended option (Option 4) was selected based on the comprehensive evaluation criteria and the input from the Public. Our further analysis confirmed Option 4 as being the recommended option. This option is the north-south alignment of New Trinity Church Road crossing Rymal Road between Pritchard Road and existing Trinity Church Road, see attached map.

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Yours truly,

[Signature]

Christine Lee-Morrison, MCIP, RPP
Acting Manager, Strategic and Environmental Planning

cc: Councillor, B. Clark, Ward 9
    Councillor, D. Mitchell, Ward 11
    Bill Farkas, Real Estate
    Darlene Cole, Real Estate
    Brenda Khes, Community Planning and Design
    Nathalie Baudais, iTRANS Consulting
28 March, 2007

Re: Trinity Church Corridor - Municipal Class Environmental Assessment Study Phases 3 & 4

Dear Sir/Madam:

This is to update you on Phases 3 and 4 of the Trinity Church Corridor Municipal Class Environmental Assessment process which is now nearing completion.

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We would like to advise you that the recommended alignment will impact your property (i.e., ). The extent of the impact will be determined upon resolution of certain technical items and the completion of the Environmental Study Report. Please contact the undersigned if you would like to meet to further discuss the land acquisition process.

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The City of Hamilton is committed to providing you with full information on this project. Should you have any questions, please do not hesitate to contact Mohan Philip of this office at (905) 548-2424 Ext 3438.

Yours truly,

[Signature]

Christine Lee-Morrison, MCIP, RPP
Acting Manager, Strategic and Environmental Planning

cc: Councillor, B. Clark, Ward 9
    Councillor, D. Mitchell, Ward 11
    Bill Farkas, Real Estate
    Darlene Cole, Real Estate
    Brenda Khes, Community Planning and Design
    Nathalie Baudais, iTRANS Consulting
Re: Trinity Church Corridor - Municipal Class Environmental Assessment Study Phases 3 & 4

Dear [Redacted],

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28 March, 2007

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NATURAL HERITAGE REPORT

TRINITY CHURCH ARTERIAL CORRIDOR CLASS ENVIRONMENTAL ASSESSMENT

prepared for:

iTRANS CONSULTING INC.

AND

THE CITY OF HAMILTON

prepared by:

LGL

April 2007
NATURAL HERITAGE REPORT

TRINITY CHURCH ARTERIAL CORRIDOR
CLASS ENVIRONMENTAL ASSESSMENT

prepared by:

Leslie L. Collins, M.Sc.
Botanist

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April 2007

LGL Project # TA4344
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Appendix A. Photographic Record
1.0 INTRODUCTION

LGL was retained by iTRANS Consulting Inc. on behalf of the City of Hamilton to participate in a Schedule “C” Class Environmental Assessment for the provision of a new road link from the Red Hill Valley Parkway Ramps at Stone Church Road to south of Rymal Road in the vicinity of Trinity Church Road. LGL’s role included the provision of a natural heritage investigation, a component of the Environmental Study Report (ESR), and participation in the evaluation of alternatives.

A natural heritage inventory was conducted to identify existing conditions and to provide the baseline information required to evaluate the potential impacts to aquatic and terrestrial habitat features as a result of proposed roadway alignments being considered within the project limits.

The Trinity Church Arterial Corridor Environmental Assessment study area is bounded by Upper Mount Albion to the east, Stone Church Road-Paramount Drive to the north, the Glover Road to the west, and Dickenson Road to the south. The study area is presented in Figure 1.

![Figure 1. Key Plan of the Study Area](image)

2.0 EXISTING CONDITIONS

The following discussion outlines the existing environmental conditions within the study area and identifies natural heritage areas and/or features of environmental sensitivity and/or significance.

2.1 Physiography and Soils

The study area lies within the Haldimand Clay Plain physiographic region, which is situated between the Niagara Escarpment and Lake Erie. In the vicinity of the Niagara Escarpment, this physiographic region is comprised of subdued moraines, with troughs comprised of lacustrine silt or clay. This topography was formed under water by the ice lobe that occupied the basin of Lake Ontario. While several streams direct drainage eastward in this region, many undrained depressions remain on higher ground (Chapman and Putnam 1984).
The soils within the study area are classified as Beverly silt loam, Binbrook silt loam, Chinguacousy silt loam, Oneida silt loam, Smithville silt loam, Toledo silt loam – shallow phase, Toledo silty clay loam and Bottom Land alluvial soil (Presant et al. 1965).

2.1.1 *Beverly silt loam*
Beverly silt loam has developed on gently sloping to level areas of parent material that are composed of lacustrine silty clay loam and silty clay. Drainage of the soil is imperfect so drainage improvement is necessary in the level areas used for agriculture. Beverly silt loam is the dominant soil type in the study area. It is located predominantly in the south eastern portion of the study area and surrounds Trinity Church Road.

2.1.2 *Binbrook silt loam*
Binbrook silt loam is developed from silt loam over clay till. This soil type has a complex and very gently sloping topography. This soil type is imperfectly drained and often requires artificial drainage for more specialized agricultural uses. The silt and loam content make this soil susceptible to erosion; however, its topography limits its susceptibility. This soil is located in the north east portion of the study area west of Trinity Church Road and south of Rymal Road.

2.1.3 *Chinguacousy silt loam*
Chinguacousy silt loam is derived from clay loam till parent materials. This soil type has a complex and very gently sloping topography. This soil type is imperfectly drained and drainage improvements are typically required for certain agricultural crops. The silt and loam content make this soil susceptible to erosion; however, its topography limits its susceptibility. Chinguacousy silt loam is located to the north of Rymal Road, north of the current northern terminus of Trinity Church Road.

2.1.4 *Oneida silt loam*
Oneida silt loam soils originate from the Brunisolic Gray Brown Luvisol soil group. They develop on fine textured glacial till composed dominantly of shale and to a lesser extent derived from limestone materials. Oneida silt loam soils are calcareous in nature, characterized by steeply sloping topography. They are well drained and good agricultural soils. The surface plough layer of Oneida silt loam is friable and susceptible to erosion. Oneida silt loam is located to the north of the current northern terminus of Trinity Church Road and west of Mount Albion Road.

2.1.5 *Smithville silt loam*
Smithville silt loam is developed from silt loam over clay till. This soil type has a complex and gently sloping topography. This soil type is moderately well drained. The silt and loam content make this soil susceptible to erosion; however, its topography limits its susceptibility and drainage may be temporarily impeded in level areas. Smithville silt loam surrounds Rymal Road between Upper Mount Albion Road and Trinity Church Road. A small band of Smithville silt loam also crosses Rymal Road and runs south through the study area.

2.1.6 *Toledo silt loam – shallow phase*
Toledo silt loam – shallow phase soils are derived from lacustrine silty clay loam and silty clay parent materials. This soil type has a simple and level to very gently sloping topography. This soil type is poorly drained. The silt and loam content make this soil susceptible to erosion; however, its topography and clay content limit its susceptibility. A small band of Toledo silt loam – shallow phase runs parallel to and north of Rymal Road, north of the current northern terminus of Trinity Church Road.
2.1.7 Toledo silty clay loam
Toledo silty clay loam is derived from lacustrine silty clay loam and silty clay parent materials. This soil type has a simple and level to very gently sloping topography. This soil type is poorly drained. The silt and loam content make this soil susceptible to erosion; however, its topography and clay content limit its susceptibility. A small band of Toledo silty clay loam crosses Rymal Road just west of Fletcher Road.

2.1.8 Bottom Land alluvial soil
Bottom Land alluvial soil is comprised of recent alluvial deposits. This soil type has variable drainage, variable to level topography and erosion is variable. This soil surrounds Tributary 1 of Hannon Creek in the study area.

2.2 Fisheries and Aquatic Ecosystems
The study area is located in the Red Hill Creek watershed, the Hannon Creek subwatershed, and the Twenty Mile Creek watershed. Several intermittent tributaries cross Trinity Church Road, Glover Road, and Rymal Road East, generally in an east-to-west direction, contributing to Hannon Creek and Red Hill Creek within the Hamilton Region Conservation Authority jurisdiction. A single tributary, which contributes to the Twenty Mile Creek watershed within the Niagara Peninsula Conservation Authority jurisdiction, crosses Trinity Church Road roughly 1.2 km south of Rymal Road. The location of watercourses in the study area is presented in Figure 2. A summary of the fisheries and aquatic habitat conditions of these watercourses is presented in Table 1.

Background fisheries information suggests that fish communities are not present within the study area (Philips 2005). However, brook stickleback (Culaea inconstans) was sampled downstream of Rymal Road in the study area as recently as 2002 (C. Portt and Associates 2002). Streams in the study area were characterized recently as part of the North Glanbrook Industrial Business Park Master Drainage Plan Stream Characterization Study (TSH 2006).

LGL investigated fish habitat function to identify fishery type and sensitivities on July 18, 2006. A total of four tributaries of Hannon Creek and one tributary of Twenty Mile Creek were investigated, all of which, were intermittent, conveying flows on a seasonal basis. Electrofishing surveys were not conducted due to the absence of sufficient depth/flow in all sampling areas. The land usage surrounding these systems is predominantly agricultural and many of the intermittent tributaries are ploughed-through or have a minor riparian vegetation belt.

2.2.1 Tributary 1 of Hannon Creek (Reach HC2-B)
Tributary 1 crosses Trinity Church Road, conveying flow from west from east, contributing to Hannon Creek. The channel is ill-defined in several locations, and enclosed through a cemetery just south of Rymal Road East. A small (approximately 30 cm diameter) corrugated steel pipe is the daylighting area for the enclosed flow, and is located at the western property limit of the cemetery. The channel traverses through abandoned and succeeding agricultural fields, with a shrub community dominated by tartarian honeysuckle (Lonicera tatarica), common buckthorn (Rhamnus cathartica) and hawthorn (Crataegus sp.) closer to Trinity Church Road and reed canary grass (Phalaris arundinacea) through much of the channel length closer to Glover Road.

Neither flows, nor standing water, were present at the Trinity Church Road and Glover Road culverts. Standing water was present in areas roughly half way between the two roads, though fish were not observed. It is thought that this area may be used during the spring freshet for direct fish habitat, but that habitat requirements for fish are not met during the summer and winter months. This reach is characterized as having low constraint in the Stream Characterization Study.
### TABLE 1. SUMMARY OF FISHERIES AND AQUATIC HABITAT CONDITIONS

<table>
<thead>
<tr>
<th>Sampling Location</th>
<th>Name</th>
<th>Type of Fishery</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tributary 1 of Hannon Creek</td>
<td>Indirect fish habitat</td>
<td>• Intermittent swale  &lt;br&gt; • Contained only wet pockets with discontinuous flow within channel during investigation &lt;br&gt; • Minor channel definition evident &lt;br&gt; • Enclosed through Trinity Church Cemetery, open channel off-property</td>
</tr>
<tr>
<td>2</td>
<td>Tributary 2 of Hannon Creek</td>
<td>Indirect fish habitat</td>
<td>• Intermittent swale  &lt;br&gt; • Dry during investigation  &lt;br&gt; • Loosely defined channel &lt;br&gt; • Minor riparian component</td>
</tr>
<tr>
<td>3</td>
<td>Tributary 1 of Twenty Mile Creek</td>
<td>Indirect fish habitat</td>
<td>• Intermittent swale through agricultural field  &lt;br&gt; • Dry during investigation  &lt;br&gt; • Riparian community generally absent through study area</td>
</tr>
<tr>
<td>4</td>
<td>Tributary 4 of Hannon Creek</td>
<td>Indirect fish habitat</td>
<td>• Intermittent swale through agricultural field  &lt;br&gt; • Dry during investigation  &lt;br&gt; • Riparian community generally absent through study area</td>
</tr>
<tr>
<td>5</td>
<td>Tributary 3 of Hannon Creek</td>
<td>Indirect fish habitat</td>
<td>• Intermittent swale through abandoned agricultural field  &lt;br&gt; • Connectivity not evident &lt;br&gt; • Channel form not evident</td>
</tr>
</tbody>
</table>
2.2.2 Tributary 2 of Hannon Creek (Reach HC2-C)
Tributary 2 crosses Trinity Church Road south of Tributary 1 in a similar manner, east flowing to the west and contributing to Hannon Creek. The channel is contained within a roughly 15 m grassed buffer and traverses cropped agricultural fields on both sides of Trinity Church Road. Karst topography is believed to exist on the east side of Trinity Church, where flows may recharge to groundwater, though this has not been confirmed. A small pool of standing water was noted on the downstream (west) side of Trinity Church Road, though fish were not observed. This reach is characterized as having low constraint in the Stream Characterization Study.

2.2.3 Tributary 3 of Hannon Creek (HC1-B)
Tributary 3 of Hannon Creek appears as a disjointed channel on Ontario Base Mapping (OBM), initiating and terminating in a single field. It is possible that the channel may head underground while in karst topography. During the site visit there was no evidence of a defined channel, nor any water, suggesting that only sheet flow is conveyed. This reach is not characterized at Trinity Church Road. Downstream of Pritchard Road, the reach is characterized as having medium constraint in the Stream Characterization Study.

2.2.4 Tributary 4 of Hannon Creek (HC3-I)
Tributary 4 of Hannon Creek conveys flow across Glover Road to the west from the east. The channel conveys flows towards Hannon Creek on an intermittent basis. The channel originates within the study area, but is likely the result of sheet flow, rather than groundwater upwelling. The riparian cover in the headwaters is largely absent, with active agricultural cropping surrounding. Small areas of natural vegetation are present at the Glover Road culvert, offering minor amounts of shade and shore cover. Water was not present during the site investigation. This reach is characterized as having low constraint in the Stream Characterization Study.

2.2.5 Tributary 1 of Twenty Mile Creek
Tributary 1 of Twenty Mile Creek appears to convey flow from west to east across Trinity Road East through a roughly 15 m herbaceous vegetated riparian belt. The channel is ill-defined and water was not present within the study area, or at the Trinity Road crossing.

2.2.6 Species at Risk
No aquatic species at risk have been documented historically or recently in the study area.

2.3 Vegetation and Vegetation Communities
The geographical extent, composition, structure and function of vegetation communities were identified through air photo interpretation and field investigations. Air photos were interpreted to determine the limits and characteristics of vegetation communities. Field investigations of natural/semi-natural vegetation were conducted within the study area on July 13, 2006 to ground truth the boundaries of vegetation communities and to conduct a botanical survey.

Vegetation communities were classified according to the Ecological Land Classification for Southern Ontario: First Approximation and Its Application (Lee et al. 1998). The community was sampled using a plotless method for the purpose of determining general composition and structure of the vegetation. Vascular plant nomenclature follows Newmaster et al. (1998) with a few exceptions.
2.3.1 Vegetation Communities

Much of the vegetation within the study area is of anthropogenic origin, resulting from ongoing agricultural, residential and commercial land use. Active agricultural fields in the study area include crops of corn (*Zea mays*), wheat (*Triticum aestivum*), mixed hay and forage crops.

Natural/semi-natural vegetation communities in the study area include Reed Canary-grass Mineral Meadow Marshes (MAM2-2) and Cattail Mineral Shallow Marshes (MAS2-1). These are primarily associated with tributaries of Hannon Creek in the study area.

Cultural vegetation communities are the predominant vegetation community types in the study area and include Dry-Moist Old Field Meadows (CUM1-1), Dogwood Cultural Thickets (CUT1-4) and Mineral Cultural Woodlands (CUW1A, CUW1B). These communities are delineated in Figure 2 and described in Table 2.

2.3.2 Flora

To date, a total of 115 vascular plant taxa have been documented within the study area. Fifty-eight (58) taxa, 50 percent of the recorded flora, are considered introduced and non-native to Ontario. A list of vascular plants identified within the study area is presented in Table 3.

2.3.3 Species at Risk

Plant species status was reviewed for the City of Hamilton (Dwyer 2003) and Ontario (Oldham 1999). No plant species considered rare, threatened or endangered (R,T,E) in Ontario or in the City of Hamilton were documented during the July 2006 field investigations.

Vegetation community status was reviewed for Ontario (NHIC 1997). The vegetation communities identified within the study area are considered widespread and common in Ontario and secure globally (NHIC 1997).
<table>
<thead>
<tr>
<th>ELC Code</th>
<th>Vegetation Type</th>
<th>Species Association</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Terrestrial – Cultural</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUM</td>
<td>CULTURAL MEADOW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUM1-1</td>
<td>Dry-Moist Old Field Meadow Type</td>
<td><strong>Ground Cover:</strong> Brome and alfalfa dominant, with Canada goldenrod, tall goldenrod, timothy, red clover, bird vetch, black medick, lance-leaved plantain, reed-canary grass, common ragweed, common milkweed, common burdock, velvet-leaf, bull thistle, ox-eye daisy, chickory, lamb’s-quarters, teasel, wild carrot, scarlet strawberry, common St. John’s-wort, Kentucky bluegrass, Canada bluegrass, curled dock and common dandelion</td>
<td>Cultural communities (CU).&lt;br&gt;Tree cover and shrub cover &lt; 25 % (M).&lt;br&gt;This community can occur on a wide range of soil moisture regimes (Dry-Moist).&lt;br&gt;Pioneer communities establishing in abandoned agricultural fields.</td>
</tr>
<tr>
<td>CUT</td>
<td>CULTURAL THICKET</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUT1-4</td>
<td>Dogwood Cultural Thicket</td>
<td><strong>Canopy:</strong> Grey dogwood dominant, sparse canopy of dotted hawthorn or staghorn sumac dominant in some sections, mid-aged sugar maple, red ash, sweet cherry, black cherry scattered throughout in hedgerow locations&lt;br&gt;<strong>Understorey:</strong> Grey dogwood dominant, with Tartarian honeysuckle, choke cherry, staghorn sumac, wild red raspberry and thimble-berry&lt;br&gt;<strong>Ground Cover:</strong> Garlic mustard dominant, scarlet strawberry, enchanter’s nightshade and white avens</td>
<td>Cultural communities (CU).&lt;br&gt;Tree cover &lt; 25 % and shrub cover &gt; 25 % (T).&lt;br&gt;Mineral soil (1).&lt;br&gt;Dogwood dominant (-4).&lt;br&gt;Pioneer and young communities with scattered mid-aged and mature trees located along hedgerows and in areas historically but not presently used for agricultural purposes.</td>
</tr>
<tr>
<td>CUW</td>
<td>CULTURAL WOODLAND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUW1A</td>
<td>Black Walnut Cultural Woodland</td>
<td><strong>Canopy:</strong> Open canopy of young black walnut&lt;br&gt;<strong>Sub-canopy:</strong> Dotted hawthorn dominant, with black walnut, Tartarian honeysuckle and common buckthorn&lt;br&gt;<strong>Understorey:</strong> Thimble-berry dominant with red currant&lt;br&gt;<strong>Ground Cover:</strong> Garlic mustard, enchanter’s nightshade and yellow avens dominant</td>
<td>Cultural communities (CU).&lt;br&gt;Tree cover ranges from 35 to 60 % (W).&lt;br&gt;Mineral soil (1).&lt;br&gt;Black walnut dominant in an open canopy (A).&lt;br&gt;Young communities in areas historically but not presently used for agricultural purposes.</td>
</tr>
<tr>
<td>ELC Code</td>
<td>Vegetation Type</td>
<td>Species Association</td>
<td>Comments</td>
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<tr>
<td>CUW1B</td>
<td>Coniferous Cultural Woodland</td>
<td><strong>Canopy:</strong> Open canopy of young white pine and Norway spruce&lt;br&gt;<strong>Sub-canopy:</strong> Common buckthorn, glossy buckthorn and black walnut&lt;br&gt;<strong>Understorey:</strong> Tartarian honeysuckle, grey dogwood and thimbleberry&lt;br&gt;<strong>Ground Cover:</strong> Garlic mustard, enchanter’s nightshade, yellow avens, Canada avens, bittersweet nightshade</td>
<td>Cultural communities (CU).&lt;br&gt;Tree cover ranges from 35 to 60 % (W).&lt;br&gt;Mineral soil (1).&lt;br&gt;Pioneer to young communities.&lt;br&gt;Young community in close proximity to residential dwellings on Rymal Road.</td>
</tr>
<tr>
<td>MAM</td>
<td>MEADOW MARSH</td>
<td><strong>Canopy:</strong> Sparse grey dogwood&lt;br&gt;<strong>Ground Cover:</strong> Reed-canary grass dominant, with beggar’s-ticks, New England aster, redtop, lady’s-thumb, dark-green bulrush and tall goldenrod</td>
<td>Tree and shrub cover &lt; 25 % and water table seasonally drops below the substrate surface (MAM).&lt;br&gt;Mineral soil (2).&lt;br&gt;Reed-canary grass dominant (-2).&lt;br&gt;Community surrounds a tributary of Hannon Creek.</td>
</tr>
<tr>
<td>MAM2-2</td>
<td>Reed-canary Grass Mineral Meadow Marsh Type</td>
<td><strong>Canopy:</strong> Sparse grey dogwood&lt;br&gt;<strong>Ground Cover:</strong> Reed-canary grass dominant, with beggar’s-ticks, New England aster, redtop, lady’s-thumb, dark-green bulrush and tall goldenrod</td>
<td>Tree and shrub cover &lt; 25 % and water table seasonally drops below the substrate surface (MAM).&lt;br&gt;Mineral soil (2).&lt;br&gt;Reed-canary grass dominant (-2).&lt;br&gt;Community surrounds a tributary of Hannon Creek.</td>
</tr>
<tr>
<td>MAS</td>
<td>SHALLOW MARSH</td>
<td><strong>Ground Cover:</strong> Common cattail and dark-green bulrush dominant, with riverbank grape, willow-herbs, teasel, beggar’s-ticks and common duckweed</td>
<td>Standing or flowing water for much of the growing season and hydrophytic emergent macrophyte cover &gt; 25 % (MAS).&lt;br&gt;Mineral soil (2).&lt;br&gt;Cattails are dominant (-1).&lt;br&gt;Community established in ponds in the study area.</td>
</tr>
<tr>
<td>MAS2-1</td>
<td>Cattail Mineral Shallow Marsh Type</td>
<td><strong>Ground Cover:</strong> Common cattail and dark-green bulrush dominant, with riverbank grape, willow-herbs, teasel, beggar’s-ticks and common duckweed</td>
<td>Standing or flowing water for much of the growing season and hydrophytic emergent macrophyte cover &gt; 25 % (MAS).&lt;br&gt;Mineral soil (2).&lt;br&gt;Cattails are dominant (-1).&lt;br&gt;Community established in ponds in the study area.</td>
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### TABLE 3.  
**WORKING VASCULAR PLANT CHECKLIST**

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<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>COSEWIC</th>
<th>OMNR</th>
<th>Local Status</th>
<th>Legal Status</th>
<th>Vegetation Community</th>
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<tr>
<td><strong>EQUISETACEAE</strong></td>
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<tr>
<td>Equisetum arvense</td>
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| **PINACEAE** | PINE FAMILY |         |      |              |              |                       |
| * Picea abies | Norway spruce |         |      |              | x            |                       |
| * Picea pungens | Colorado spruce |         |      |              | x            |                       |
| Pinus strobus | eastern white pine |         |      |              | x            |                       |

| **CUPRESSACEAE** | CEDAR FAMILY |         |      |              |              |                       |
| Thuja occidentalis | eastern white cedar |         |      |              | x            |                       |

| **ULMACEAE** | ELM FAMILY |         |      |              |              |                       |
| Ulmus americana | white elm |         |      |              | x            | x x x                |

| **JUGLANDACEAE** | WALNUT FAMILY |         |      |              |              |                       |
| * Carya ovata var. ovata | shagbark hickory |         |      |              | x            |                       |
| Juglans nigra | black walnut |         |      |              | x            | x x x                |
| * Juglans regia | English walnut |         |      |              | x            |                       |

| **CHENOPODIACEAE** | GOOSEFOOT FAMILY |         |      |              |              |                       |
| * Chenopodium album var. album | lamb's quarters |         |      |              | x            |                       |

| **CARYOPHYLLACEAE** | PINK FAMILY |         |      |              |              |                       |
| * Dianthus armeria | deptford pink |         |      |              | x            |                       |

| **POLYGONACEAE** | SMARTWEED FAMILY |         |      |              |              |                       |
| * Polygonum convolvulus | black bindweed |         |      |              | x            |                       |
| * Polygonum persicaria | lady's-thumb |         |      |              | x            |                       |
| * Rumex crispus | curly-leaf dock |         |      |              | x            |                       |

| **GUTTIFERAE** | ST. JOHN'S-WORT FAMILY |         |      |              |              |                       |
| * Hypericum perforatum | common St. John's-wort |         |      |              | x            | x x x                |

| **MALVACEAE** | MALLOW FAMILY |         |      |              |              |                       |
| * Abutilon theophrasti | velvet-leaf |         |      |              | x            |                       |

| **SALICACEAE** | WILLOW FAMILY |         |      |              |              |                       |
| Populus deltoides ssp. deltoides | eastern cottonwood |         |      |              | x            |                       |

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<tr>
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<th>OMNR</th>
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<th>Legal Status</th>
<th>Vegetation Community</th>
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<td>CUM1-1 CUT1-4 CUW1A CUW1B MAM2-2 MAS2-1</td>
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<td>Oxalis stricta</td>
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**WORKING VASCULAR PLANT CHECKLIST**

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<th>Local Status</th>
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<th>Vegetation Community</th>
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### TABLE 3.
**WORKING VASCULAR PLANT CHECKLIST**

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<th>Scientific Name</th>
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<th>OMNR Local Status</th>
<th>Legal Status</th>
<th>Vegetation Community</th>
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*Introduced species

**COSEWIC (Committee on the Status of Endangered Wildlife in Canada):**
- END Endangered
- THR Threatened
- SC Special Concern

**OMNR (Ontario Ministry of Natural Resources):**
- END Endangered
- THR Threatened
- SC Special Concern

**Legal Status:**
- SARA *Species at Risk Act – Schedules (1), (2), (3)*
- ESA *Endangered Species Act*
- PPS Species afforded habitat protection under the Provincial Policy Statement of the *Planning Act*

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Trinity Church Arterial Corridor Class Environmental Assessment  
Natural Heritage Report
2.4 Wildlife and Wildlife Habitat

Field investigations within the study area were conducted on July 11th and 18th, 2006 to document breeding bird evidence (BBE) and to characterize the nature, extent and significance of breeding bird usage of the habitats within the project limits. Territorial songs along with direct observations of bird breeding behaviours and locating bird nests were used to record BBE. Survey methodology and breeding bird behaviours used as evidence of breeding success were categorized according to the Breeding Bird Atlas five-year surveys programme of Bird Studies Canada (BSC).

2.4.1 Breeding Bird Habitat

The Trinity Church Corridor study area was predominantly agricultural land bordered by a few residences. The only naturalized habitat was located centrally in an area approximately 0.5 km² between Glover Road and Trinity Church Road just south of Rymal Road. This natural area was comprised of marsh, cultural meadows, cultural thickets, cultural woodlots and tributaries of Redhill Creek flowing through the north end. Although there was evidence for breeding birds in the agricultural areas, over 95 percent of the breeding birds recorded in the study area came from these natural heritage areas.

2.4.2 Fauna

Field investigations took place near the end of bird breeding season so many of the early season nesters could not be identified in the study area unless their particular nests were found. Four species of early season breeding birds however, were recorded by LGL in the same study area during early season field investigations the previous year and included in this’ surveys final results. Most of the birds recorded as breeding within the study area however, were mid to late summer breeding species.

Breeding evidence was obtained for 37 species of birds. The most productive habitats were cultural thickets and cultural meadows where BBE was found for 12 species of birds. Active nests of American Goldfinch (*Carduelis tristis*), Black-billed Cuckoo (*Coccyzus erythropthalmus*), Cedar Waxwing (*Bombycilla cedrorum*), Eastern Kingbird (*Tyrannus tyrannus*) and used nests of Willow Flycatcher (*Empidonax traillii*) and Yellow Warbler (*Dendroica petechia*) were located. Behavioral evidence for Gray Catbird (*Dumetella carolinensis*), Song Sparrow (*Melospiza melodia*), Savannah Sparrow (*Passerculus sandwichensis*) and Eastern Meadowlark (*Sturnella magna*) were also recorded in these two habitats. The cultural woodlots showed BBE for Northern Cardinal (*Cardinalis cardinalis*), Northern Flicker (*Colaptes auratus*) and Black-capped Chickadee (*Poecile atricapillus*).

BBE for Chipping Sparrow (*Spizella passerina*) and Barn Swallow (*Hirundo rustica*) was recorded around the residences along Trinity Church Road and Killdeer (*Charadrius vociferus*) and Horned Lark (*Eremophila alpestris*) were observed on territory in the agricultural fields.

A summary of the breeding birds documented in the study area during field investigations is presented in Table 4.
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### TABLE 4.
**WILDLIFE DOCUMENTED IN THE STUDY AREA BY LGL LIMITED AND OTHERS**

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<tr>
<th>Wildlife</th>
<th>Scientific Name</th>
<th>Common Name</th>
<th>COSEWIC</th>
<th>OMNR</th>
<th>Local</th>
<th>Legal Status</th>
<th>Others</th>
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<td><em>Marmota monax</em></td>
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<td>FWCA(G)</td>
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</table>
COSEWIC (Committee on the Status of Endangered Wildlife in Canada):

END Endangered
THR Threatened
SC Special Concern

Local Status:
BSC Bird Studies Canada species of conservation priority for the City of Hamilton.

OMNR (Ontario Ministry of Natural Resources):

END Endangered
THR Threatened
SC Special Concern

Legal Status:
SARA Species at Risk Act – Schedules (1), (2), (3)
ESA Endangered Species Act
FWCA Fish and Wildlife Conservation Act
(P) Protected Species
(G) Game Species
(F) Furbearing Mammals
PPS Species afforded habitat protection under the Provincial Policy Statement of the Planning Act
2.4.3 Species at Risk

None of the species recorded in the study area are considered to be of conservation concern by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) or the Ontario Ministry of Natural Resources (OMNR)/Committee on the Status of Species at Risk in Ontario (COSSARO). The *Migratory Birds Convention Act* (CBCA) protects 30 of the 37 bird species listed. The Blue Jay (*Cyanocitta cristata*) is protected under The *Fish and Wildlife Conservation Act*. Ten of the bird species listed within the study area are recommended by Bird Studies Canada as a priority species for conservation in the Hamilton-Wentworth Municipality. Many of these, including American Goldfinch, Savannah Sparrow, Black-billed Cuckoo, Northern Mockingbird (*Mimus polyglottos*) and Northern Rough-winged Swallow (*Stelgidopteryx serripennis*), are considered area sensitive particularly with regards to their breeding success.

2.5 Designated Natural Areas

There are no Provincially Significant Wetlands (PSWs) or evaluated wetlands in the study area. There is one Area of Natural and Scientific Interest in close proximity to the study area. The Eramosa Karst Earth Science ANSI extends from Highland Road to just south of Rymal Road between Upper Mount Albion Road and Second Road. This ANSI is characterized by fissures and sinkholes that have resulted from limestone being dissolved slowly over time by carbonic acid. This ANSI will soon be designated as an Environmentally Significant Area (ESA) by the City of Hamilton (XCG Consultants Limited 2005). There are no additional ESAs in the study area.

3.0 Project Description

The need for the Trinity Church Arterial Corridor was established through the Rymal Road Secondary Planning Area Master Plan and the North Glanbrook Industrial Business Park Transportation Master Plan. The recommendations for the corridor identified a four lane arterial corridor from Rymal Road to the Stone Church Road and a two lane arterial corridor south of Rymal Road (with the protection for four lanes).

The Phase 3 and 4 recommendations for the Trinity Church Arterial Corridor include:

- Alignment Option 4 (between existing Trinity Church Road and Pritchard Road);
- A new 4 lane (2 through lanes in each direction) arterial corridor from the Red Hill Valley Parkway-Stone Church Road intersection to south of Rymal Road;
- Provision of an urban cross-section for the Trinity Church Arterial Corridor north of Rymal Road and a rural cross-section south of Rymal Road;
- Sidewalks north of Rymal Road;
- Bike paths;
- Streetscaping, where feasible;
- Utilities; and,
- Median

The plans and typical cross-sections for the Trinity Church Arterial Corridor are included in the Trinity Church Arterial Corridor Class Environmental Assessment Study Report.
4.0 IMPACT ASSESSMENT AND ENVIRONMENTAL PROTECTION

This section describes the predicted environmental effects of the Trinity Church Arterial Collector and identifies environmental protection measures that should be incorporated into road design. A plan view of the new road superimposed on the existing natural heritage features is presented in Figure 3.

4.1 Physiography and Soils

The silty loam soils located within the project limits are moderately to highly susceptible to erosion. Soil disturbance associated with excavations, cut and fill, drainage alterations, etc. may result in erosion of, and sedimentation to, sensitive receiving watercourses. Site-specific erosion and sedimentation control measures to be implemented prior to construction will be identified during detail design. Erosion and sedimentation control measures will include:

- limiting the geographical extent and duration that soils are exposed to the elements;
- implementing standard erosion and sedimentation control measures in accordance with Ontario Provincial Standard Specification (OPSS) 577 including: straw bale and/or rock flow checks placed at regular intervals in ditches down gradient from areas of soil disturbance; silt fence placed along stream margins in areas of soil disturbance; applying conventional seed and mulch, tackifiers and/or erosion control blanket in areas of soil disturbance to provide adequate slope protection and long-term slope stabilization; and,
- managing surface water outside of work areas to prevent surface water from coming in contact with exposed soils.

Monitoring of erosion and sedimentation control measures during construction will be implemented to ensure their effectiveness. These environmental protection measures will greatly reduce the potential for soil erosion and impairment of water quality.

4.2 Aquatic Habitats and Communities

Watercourses located within the project limits are intermittent and do not directly support fish habitat throughout the year. As a result, potential effects on fish habitat can be fully mitigated through standard road construction practices, erosion and sedimentation control and in-water construction timing restrictions.

A warmwater baitfish community is located downstream of Trinity Church Road in Hannon Creek. In recognition of this downstream fish community, an in-water construction timing restriction should be implemented to protect fish. No in-water work should be performed from April 1 to June 30 to protect spawning, egg incubation and fry emergence in the downstream fishery.

The construction of Trinity Church Arterial Corridor will require the installation of new culverts located at Tributaries 1 and 4 of Hannon Creek. These new culverts should be open footing, where feasible. Closed culverts should be designed to accommodate fish passage including:
installing open footing culverts, where feasible;
installing the culvert on the same gradient as the existing stream bed;
avoiding gradients in excess of 0.5% where possible;
countersinking by at least 20% of the culvert’s diameter;
backfilling with native substrate; and,
sizing according to hydraulic conveyance requirements.

The construction of the Trinity Church Arterial Corridor has the potential to alter water quality and quantity by reducing the permeability of the ground resulting in increased runoff of surface water. An increase in runoff may promote erosion downstream, thus impairing water quality with sediments.

A conceptual stormwater management plan has been prepared for the broader Rymal Road Planning Area, including the Trinity Church Arterial Corridor, to address potential water quality and quantity effects. The stormwater management plan identifies a wet pond with extended detention with a total storage volume of 4,207 m$^2$. This stormwater detention pond will provide level 2 quality control and storage to meet pre-development levels prior to discharge to Hannon Creek.

Erosion and sedimentation control measures will be installed within the project limits to maintain water quality during construction. These erosion and sedimentation control measures are described previously for physiography and soils.

### 4.3 Vegetation and Vegetation Communities

Trinity Church Arterial Corridor construction has the potential to result in the displacement of and disturbance to vegetation and vegetation communities. Effects on vegetation related to these improvements may include:

- displacement of vegetation and vegetation communities;
- disturbance to vegetation through edge effects (windthrow, sunscald, changes in light conditions and invasion by exotic species), drainage modifications and salt spray; and,
- displacement of rare, threatened or endangered vegetation or significant vegetation communities.

Over time these disturbances may alter community structure, composition and function. Effects are most prominent in areas that have not been previously disturbed.

#### 4.3.1 Displacement of Vegetation and Vegetation Communities

Trinity Church Arterial Corridor will require vegetation removals within the new right-of-way. This vegetation has been disturbed previously through human activity and comprises cultural thicket and cultural meadow communities. The higher quality vegetation, including the black walnut woodlot, was avoided through route selection. To minimize the extent of vegetation removals, the following environmental protection measures should be incorporated into the design of the arterial road:

- relax the geometric standards to reduce the footprint area to the extent possible;
- restore disturbed areas with a native seed mix;
- provide localized tree protection, including guiderails, retaining walls and ditches, where warranted; and,
• install a temporary tree protection barrier around trees to be protected during construction in accordance with OPSS 565.

Despite these environmental protection measures, a net loss of vegetation will occur as a result of this project. The type and extent of vegetation removals are presented in Table 5. The loss of vegetation can be partially offset through planting native, non-invasive, complementary species in protected areas in consultation with the HRCA.

4.3.2 Disturbance to Vegetation and Vegetation Communities

The development of Trinity Church Arterial Corridor will result in disturbance to vegetation located adjacent to the right-of-way. Since this vegetation is cultural in origin (i.e. previously disturbed), the effects of disturbance are considered minor.

The effects of salt spray on vegetation are considered minor and unavoidable due to safety concerns. Vegetation dieback is typically limited to the outermost edge of vegetation communities and varies based on the orientation of the transportation corridor, the direction of the prevailing winds, the frequency and volume of salt applied, and the sensitivity of the receiving vegetation to salt. Measures to reduce potential impacts of road salt include:

• manage the application of road salt through judicious timing, improved spreader machinery, pre-wetting methods, pavement temperature monitoring, and other techniques; and,

• use alternative substances to de-icing salt including other chloride salts, and acetate-based substances, where appropriate.

These measures will keep vegetation dieback to a minimum.

4.3.3 Displacement of Rare, Threatened or Endangered Vegetation or Significant Vegetation Communities

No plant species of conservation concern or significant vegetation communities will be lost or disturbed by road development.
<table>
<thead>
<tr>
<th>ELC Community</th>
<th>Location(s)</th>
<th>Site-Specific Impacts</th>
<th>Proposed Mitigation</th>
<th>Net Environmental Effect</th>
</tr>
</thead>
</table>
| CUT1-4        | north and south of Rymal Road     | • removal of approximately 1,361 m² of CUT1-4 | • relax geometric design standards to minimize area of footprint  
• delineate work zone using construction fencing/tree protection barrier  
• manage the application of road salt to the extent possible  
• restore disturbed areas with native seed mix  
• plant native, non-invasive, complementary vegetation to compensate for vegetation removals | • minor loss of vegetation with low significance |
| CUM1-1        | south of Rymal Road               | • removal of approximately 979 m² of CUM1-1   | • relax geometric design standards to minimize area of footprint  
• delineate work zone using construction fencing/tree protection barrier  
• manage the application of road salt to the extent possible  
• restore disturbed areas with native seed mix  
• plant native, non-invasive, complementary vegetation to compensate for vegetation removals | • minor loss of vegetation with low significance |
4.4 Wildlife and Wildlife Habitat

Development of the Trinity Church Arterial Corridor has the potential to result in the displacement of and disturbance to wildlife and wildlife habitat. Effects on wildlife related to these improvements may include:

- displacement of wildlife and wildlife habitat;
- barrier effects on wildlife passage;
- wildlife/vehicle conflicts;
- disturbance to wildlife from noise, light and visual intrusion; and,
- displacement of rare, threatened or endangered wildlife and significant wildlife habitat.

Effects are most prominent in areas that have not been previously disturbed.

4.4.1 Displacement of Wildlife and Wildlife Habitat

Trinity Church Arterial Corridor will be constructed primarily through agricultural lands and cultural vegetation communities. These areas primarily consist of previously modified/disturbed terrestrial wildlife habitat with low habitat structure and diversity. Consequently, road development will result in the loss of approximately 2,340 m² of habitat with limited capability for wildlife. The effects of habitat removal on wildlife can be mitigated through the following measures:

- avoid vegetation clearing during wildlife breeding seasons, primarily March 15 to July 31; and,
- disperse, capture and relocate wildlife prior to vegetation clearing.

Numerous bird species located within the project limits are listed under the *Migratory Birds Convention Act* (MBCA). The MBCA prohibits the killing, capturing, injuring, taking or disturbing of migratory birds (including eggs) or damaging, destroying, removing or disturbing of nests. Migratory insectivorous and non-game birds are protected year-round and migratory game birds are protected from March 10 to September 1. No permits are issued for the destruction of migratory birds or their nests incidental to some other undertaking or activity and project works or activities are not specifically prohibited under the Act. To meet the requirements of the MBCA, no vegetation removals should occur during the nesting season. With several exceptions, this includes the period from April 1 to July 31. If vegetation clearing is required during this period, a nesting survey should be carried out by a qualified avian biologist prior to construction. If active nests are found, a site-specific mitigation plan should be prepared in consultation with the Canadian Wildlife Service.

4.4.2 Barrier Effects on Wildlife Passage

Trinity Church Arterial Corridor will sever a minor wildlife corridor located along Tributary 1 of Hannon Creek. This wildlife corridor is not well defined, does not provide a significant linkage with nearby natural areas and is fragmented by agricultural fields. As a result, this effect is considered minor and it can be ameliorated by installing an oversized culvert on Trinity Church Arterial Corridor where it crosses Tributary 1 of Hannon Creek.

4.4.3 Disturbance to Wildlife from Noise, Light and Visual Intrusion

Noise, light and visual intrusion may alter wildlife activities and patterns. In rural residential/agricultural settings, such as the study area, wildlife have become acclimatized to human presence and only those fauna that are tolerant of human activities remain. Given that wildlife are acclimatized to rural
development and agricultural activities in the study area, the tolerance of the wildlife assemblage to human activities and the type of habitat to be lost, disturbance to wildlife from noise, light and visual intrusion will have no significant adverse effects.

4.4.4 Displacement of Rare, Threatened or Endangered Wildlife or Significant Wildlife Habitat

No wildlife species of conservation concern or significant wildlife habitat will be lost or disturbed by road development.

4.5 Designated Natural Areas

No designated natural areas will be affected by the Trinity Church Arterial Corridor.

5.0 MONITORING

During construction, an environmental inspector should make frequent random site visits. The environmental inspector will be responsible for delineating work areas, ensuring that erosion and sedimentation control measures are functional, and that the provisions related to fisheries and watercourse protection are met.
6.0 REFERENCES


APPENDIX A
PHOTOGRAPHIC RECORD
Photo 1 - Tributary 1 of Hannon Creek facing west

Photo 2 - Tributary 1 of Hannon Creek facing west ~400m west of Trinity Church Road

Photo 3 - Tributary 1 of Hannon Creek ~200m west of Trinity Church Road

Photo 4 - Tributary 1 ~200m west of Trinity Church Road

Photo 5 - Tributary 1 of Hannon Creek facing west ~300m west of Trinity Church Road

Photo 4 - Tributary 1 of Hannon Creek facing west ~300m west of Trinity Church Road
PHOTO APPENDIX

Photo 7- Tributary 1 of Hannon Creek ~325m west of Trinity Church Road

Photo 8- From Rymal Road facing south at intersection with Pritchard Road

Photo 9- From Rymal Road facing south at intersection with Pritchard Road

Photo 10- From Rymal Road facing south ~100m west of Trinity Church Road

Photo 11- Tributary 1 at Trinity Church Road facing west

Photo 12- Tributary 1 at Trinity Church Road facing east
Photo 13 - Tributary 1 at Trinity Church Road

Photo 14 - Tributary 2 at Trinity Church Road facing west

Photo 15 - Tributary 2 at Trinity Church Road facing west

Photo 16 - Tributary 2 at Trinity Church Road facing east

Photo 17 - Tributary 2 at Trinity Church Road facing east

Photo 18 – not available
PHOTO APPENDIX

Photo 19- Tributary of 20 Mile Creek facing west from Trinity Church Road

Photo 20- Tributary of 20 Mile Creek facing west from Trinity Church Road

Photo 21- Tributary of 20 Mile Creek facing east from Trinity Church Road

Photo 22- Tributary of 20 Mile Creek facing east from Trinity Church Road

Photo 23- Tributary 4 of Hannon Creek facing east from Glover Road

Photo 24- Tributary 4 of Hannon Creek facing the east side of culvert at Glover Road
Photo 25- Tributary 4 of Hannon Creek facing west from Glover Road

Photo 26- Tributary 4 of Hannon Creek facing the west side of Culvert at Glover Road

Photo 27- Tributary 1 of Hannon Creek at the Glover Road/Rymal Road intersection facing east

Photo 28- Tributary 1 of Hannon Creek at the Glover Road/Rymal Road intersection facing the east side of culvert

Photo 29- Tributary 1 of Hannon Creek at the Glover Road/Rymal Road intersection facing west

Photo 30- Tributary 1 of Hannon Creek at the Glover Road/Rymal Road intersection facing the west side of culvert
Photo 31- Tributary 1 of Hannon Creek culvert crossing Glover Road

Photo 32- Tributary 1 at Trinity Church Road

Photo 33- Tributary 1 at Trinity Church Road

Photo 34- Tributary 3 of Hannon Creek ~250m north of Rymal Road

Photo 35- Tributary 3 of Hannon Creek ~250m north of Rymal Road
Stage 1 Archaeological Assessment

Rymal Road Planning Area (ROPA 9 Lands)
Master Plan Class Environmental Assessment Study,
City of Hamilton, Ontario

Submitted to:

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ASI File 06EA-171
Archaeological License P057
MCL CIF P057-280-2006

October 2006
ARCHAEOLOGICAL SERVICES INC.  
ENVIRONMENTAL ASSESSMENTS

PROJECT PERSONNEL

Project Director:                    Robert H. Pihl, M.A.  
                                      Partner and Senior Archaeologist  
                                      Manager, Environmental Assessments

Project Administrator:              Caitlin Pearce, Hon. B.A.  
                                      Research Archaeologist

Field Director:                    Peter Carruthers, M.A.  
                                      Senior Associate

Report Writers and Graphics:        Deborah Pihl, B.A.  
                                      Staff Archaeologist
                                      Annie Veilleux, Hon. B.A., Diploma CCM  
                                      Research Archaeologist
Stage 1 Archaeological Assessment
Rymal Road Planning Area (ROPA 9 Lands) Master Plan
Class Environmental Assessment Study,
City of Hamilton, Ontario

1.0 INTRODUCTION

Archaeological Services Inc. (ASI) was contracted the City of Hamilton to conduct a Stage 1 archaeological assessment for the Rymal Road Planning Area (ROPA 9 Lands) Master Plan Class Environmental Assessment Study, City of Hamilton, Ontario. This study focuses on the preliminary road alignment options for:

1) the Trinity Church Corridor Extension (north and south of Rymal Road);
2) a collector road within the Trinity Neighbourhood; and
3) the Dartnall Road Extension.

These three alignment options involve two study areas as illustrated in Figure 1.

The assessment was conducted under the project direction of Mr. Robert Pihl, ASI, under an archaeological license (P057) issued to Mr. Pihl. All fieldwork was conducted by Peter Carruthers (P163), pursuant to the Ontario Heritage Act (2005).

Figure 1: Location of the study area. (NTS map 30 M/04, Hamilton-Grimsby)
Permission to access the study areas and to carry out the activities necessary for the completion of the Stage 1 assessment was granted to ASI by the City of Hamilton on June 26, 2006.

2.0 STAGE 1 BACKGROUND RESEARCH

The Stage 1 archaeological assessment of the EA study areas was conducted in accordance with the Ontario Ministry of Culture’s archaeological assessment technical guidelines (1993; 2006). A Stage 1 archaeological assessment involves research to describe the known and potential archaeological resources within a study area. Such an assessment incorporates a review of previous archaeological research, physiography, and land use history for the study areas. Background research was completed to identify any archaeological sites in the study areas and to assess their archaeological site potential.

2.1 Previous Archaeological Research

In order that an inventory of archaeological resources could be compiled for the study areas, three sources of information were consulted: registered archaeological site records kept by the Ontario Ministry of Culture; published and unpublished documentary sources; and the files of ASI.

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the Ontario Ministry of Culture. This database contains archaeological sites registered according to the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometres east to west, and approximately 18.5 kilometres north to south. Each Borden Block is referenced by a four-letter designator, and sites within a block are numbered sequentially as they are found. The study areas under review are located in Borden Blocks AhGw and AhGx.

According to the OASD, there are 35 previously registered archaeological sites within the limits of the two study areas illustrated in Figure 1 (see Table 1). These sites include pre-contact campsites, lithic scatters and isolated finds, as well as historic Euro-Canadian scatters, dumps and a homestead. At least sixteen of the sites are within 100 metres of corridor options, and many have been identified during the course of previous archaeological assessments in the study areas (cf. ASI 2005b; ASI 2006a, b, c; Timmins Martelle 2006). Several of the studies (ASI 2006b, 2006c) are still in progress, and only partial results were available for inclusion in this report.

Table 1: Registered Sites within 1 km of the Study Areas

<table>
<thead>
<tr>
<th>Borden #</th>
<th>Name</th>
<th>Cultural Affiliation</th>
<th>Site Type</th>
<th>Researcher</th>
</tr>
</thead>
<tbody>
<tr>
<td>AhGw-28</td>
<td>Soley 1</td>
<td>Undetermined pre-contact</td>
<td>Undetermined</td>
<td>Leslie 1977</td>
</tr>
<tr>
<td>AhGw-29</td>
<td>Soley 2</td>
<td>Archaic</td>
<td>Campsite</td>
<td>Leslie 1977</td>
</tr>
<tr>
<td>AhGw-69</td>
<td>---</td>
<td>Undetermined pre-contact</td>
<td>Isolated Find</td>
<td>Mayer 1988</td>
</tr>
<tr>
<td>AhGw-70</td>
<td>---</td>
<td>Undetermined pre-contact</td>
<td>Isolated Find</td>
<td>Mayer 1988</td>
</tr>
<tr>
<td>AhGw-133</td>
<td>Shadyglen</td>
<td>Late Woodland</td>
<td>Campsite</td>
<td>Woodley 2002</td>
</tr>
<tr>
<td>AhGw-153</td>
<td>---</td>
<td>Archaic</td>
<td>Lithic Scatter</td>
<td>Woodley 2003</td>
</tr>
<tr>
<td>AhGw-154</td>
<td>---</td>
<td>Undetermined pre-contact</td>
<td>Isolated Find</td>
<td>Woodley 2003</td>
</tr>
<tr>
<td>AhGw-193</td>
<td>---</td>
<td>Euro-Canadian</td>
<td></td>
<td>ASI 2006</td>
</tr>
<tr>
<td>AhGw-194</td>
<td>---</td>
<td>Euro-Canadian</td>
<td></td>
<td>ASI 2006</td>
</tr>
<tr>
<td>AhGw-195</td>
<td>Highland I</td>
<td>Undetermined pre-contact</td>
<td>camp</td>
<td>ASI 2006</td>
</tr>
<tr>
<td>AhGw-196</td>
<td>Highland II</td>
<td>Indeterminate Camp</td>
<td></td>
<td>ASI 2006</td>
</tr>
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</table>
### Stage 1 Archaeological Assessment
**Rymal Road Planning Area (ROPA 9 Lands) Master Plan Class EA Study**
**City of Hamilton, Ontario**

<table>
<thead>
<tr>
<th>Borden #</th>
<th>Name</th>
<th>Cultural Affiliation</th>
<th>Site Type</th>
<th>Researcher</th>
</tr>
</thead>
<tbody>
<tr>
<td>AhGw-197</td>
<td>Highland III</td>
<td>Indeterminate camp</td>
<td></td>
<td>ASI 2006</td>
</tr>
<tr>
<td>AhGw-198</td>
<td>Highland IV</td>
<td>Indeterminate camp</td>
<td></td>
<td>ASI 2006</td>
</tr>
<tr>
<td>AhGw-206</td>
<td>---</td>
<td>Undetermined pre-contact</td>
<td>Isolated Find</td>
<td>Martelle 2005</td>
</tr>
<tr>
<td>AhGw-207</td>
<td>---</td>
<td>Historic Euro-Canadian</td>
<td>Scatter</td>
<td>Martelle 2005</td>
</tr>
<tr>
<td>AhGw-208</td>
<td>---</td>
<td>Pre-contact</td>
<td>Isolated finds</td>
<td>Martelle 2005</td>
</tr>
<tr>
<td>AhGw-209</td>
<td>---</td>
<td>Historic Euro-Canadian</td>
<td>Scatter</td>
<td>Martelle 2005</td>
</tr>
<tr>
<td>AhGw-210</td>
<td>---</td>
<td>Middle Archaic</td>
<td>Isolated Find</td>
<td>Martelle 2005</td>
</tr>
<tr>
<td>AhGw-211</td>
<td>---</td>
<td>Middle Archaic</td>
<td>Isolated Find</td>
<td>Martelle 2005</td>
</tr>
<tr>
<td>AhGw-212</td>
<td>---</td>
<td>Historic Euro-Canadian</td>
<td>Scatter</td>
<td>Martelle 2005</td>
</tr>
<tr>
<td>AhGw-213</td>
<td>---</td>
<td>Middle Woodland</td>
<td>Findspot</td>
<td>Martelle 2005</td>
</tr>
<tr>
<td>AhGw-214</td>
<td>---</td>
<td>Undetermined pre-contact</td>
<td>Isolated Find</td>
<td>Martelle 2005</td>
</tr>
<tr>
<td>AhGw-215</td>
<td>---</td>
<td>Late Woodland</td>
<td>Isolated Find</td>
<td>Martelle 2005</td>
</tr>
<tr>
<td>AhGw-216</td>
<td>---</td>
<td>Historic Euro-Canadian</td>
<td>Scatter</td>
<td>Martelle 2005</td>
</tr>
<tr>
<td>AhGw-217</td>
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<td>Historic Euro-Canadian</td>
<td>Scatter</td>
<td>Martelle 2005</td>
</tr>
<tr>
<td>AhGw-219</td>
<td>Soley III</td>
<td>Early Archaic</td>
<td>Campsite</td>
<td>ASI 2006</td>
</tr>
<tr>
<td>AhGw-233</td>
<td>---</td>
<td>Historic Euro-Canadian</td>
<td>Dump</td>
<td>ASI 2006</td>
</tr>
<tr>
<td>AhGw-234</td>
<td>---</td>
<td>Historic Euro-Canadian</td>
<td>Dump</td>
<td>ASI 2006</td>
</tr>
<tr>
<td>AhGw-235</td>
<td>---</td>
<td>Undetermined pre-contact</td>
<td>Lithic scatter</td>
<td>ASI 2006</td>
</tr>
<tr>
<td>AhGw-237</td>
<td>---</td>
<td>Early Woodland</td>
<td>Isolated Find</td>
<td>ASI 2006</td>
</tr>
<tr>
<td>AhGw-238</td>
<td>---</td>
<td>Undetermined pre-contact</td>
<td>Isolated Find</td>
<td>ASI 2006</td>
</tr>
<tr>
<td>AhGw-239</td>
<td>---</td>
<td>Undetermined pre-contact</td>
<td>Isolated Find</td>
<td>ASI 2006</td>
</tr>
<tr>
<td>AhGx-113</td>
<td>Jeremiah Horning</td>
<td>Historic Euro-Canadian</td>
<td>Homestead</td>
<td>Mayer 1987</td>
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<tr>
<td>AhGx-252</td>
<td>B. Drinkwater</td>
<td>Late Archaic</td>
<td>Campsite</td>
<td>Mayer 1988</td>
</tr>
<tr>
<td>AhGx-609</td>
<td>---</td>
<td>Late Archaic</td>
<td>Isolated Find</td>
<td>Murray 2005</td>
</tr>
</tbody>
</table>

**AhGx-xxx**: Sites within 100 metres of a road option

2.2 **Physiography**

The study areas are situated on high ground adjoining the Niagara Escarpment within the Haldimand Clay Plain physiographic region of southern Ontario. At one time, Glacial Lake Warren covered this area and deposited clay over much of the underlying till (Chapman and Putnam 1984: 156-157). In this area, a series of low recessional moraines were built by the ice lobe that occupied the basin of Lake Ontario. The study areas have an elevation of approximately 200 metres, and have little relief due to having been built under water.

Another physiographic feature is the Eramosa Karst Area of Natural and Scientific Interest (Buck et al 2003). The core of the karst area coincides with the northwest portion of the smaller study area (Trinity Neighborhood Collector project), and the larger feeder area including a number of springs and sinkholes encompasses the entire small study area as well as the northeast corner of the larger study area (Trinity Church Road Extension project).

Potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in south central Ontario after the Pleistocene era, proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most commonly used variables for predictive modeling of site location. The Ontario Ministry of Culture Primer on Archaeology, Land Use Planning and Development in Ontario (1997: 12-13) stipulates that undisturbed lands within 300 metres
of a primary water source, and undisturbed lands within 200 metres of a secondary water source, are considered to exhibit archaeological potential.

The study areas are intersected by various tributaries of Twenty Mile Creek, Sinkhole Creek and Red Hill Creek, and the watercourses and springs were probably important foci for pre-contact settlement. Aboriginal people would have been attracted to the rivers and creeks especially during the spring, by the abundance of fish, as well as by other important aquatic resources.

Therefore, depending on the degree of previous land disturbance, it may be concluded that there is potential for the recovery of archaeological remains within the study areas.

2.3 Assessment of Historic Site Potential

The 1875 Illustrated Historical Atlas of the County of Wentworth, Ontario was reviewed to determine the potential for the presence of nineteenth century archaeological remains within the study areas. The study areas are situated at the juncture of four former townships: the southwest corner of Saltfleet, the southeast corner of Barton, the northeast corner of Glanford, and the northwest corner of Binbrook (Figure 2).

According to the Atlas, a number of residents and historical features are illustrated within the study areas (Table 2). Most of the illustrated historical features consist of residences and orchards, but there are also two lime kilns, three churches, two mills, two blacksmith shops, and one school house illustrated within the study areas. Many of the non-residential features are clustered along Rymal Road.

Another feature illustrated in the atlas is the Hamilton and Lake Erie Railway, which crosses the study area in a northeast-southwest direction. This rail line was built in 1875, amalgamated in 1888 with the Grand Trunk Railway, and subsequently amalgamated with Canadian National Railway (Andrea 1997). The rail line right-of-way is now a hiking trail.

It should be noted, however, that not all features of interest were mapped systematically in the Ontario series of historical atlases, given that they were financed by subscription, and subscribers were given preference with regard to the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the 1875 Atlas.

For the Euro-Canadian period, the majority of early nineteenth century farmsteads (i.e., those which are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps) are likely to be captured by the basic proximity to the water model outlined in Section 2.2, since these occupations were subject to similar environmental constraints. An added factor however is the development of the network of concession roads and railroads through the course of the nineteenth century. These transportation routes frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 metres of an early settlement road or railway are also considered to have potential for the presence of Euro-Canadian archaeological sites.

Therefore, depending on the degree of previous land disturbance, it may be concluded that there is potential for the recovery for historic cultural material within the Rymal Road Planning Area Master Plan study area.
2.5 Summary of Archaeological Site Potential (Based on Background Research)

Based on the presence of Twenty Mile Creek, Sinkhole Creek and Red Hill Creek tributaries, the presence of historical features within the study areas as illustrated on 19th century mapping, and the fact that a historic railroad as well as historic settlement roads cut through the study areas, they have the potential for the presence of pre-contact and historic archaeological sites depending on the intensity of more recent development and landscape alterations. The archaeological site potential is also attested to by the presence of 25 registered archaeological sites within the general limits of the two study areas.
<table>
<thead>
<tr>
<th>Township</th>
<th>Concession</th>
<th>Lot</th>
<th>Resident(s)</th>
<th>Feature(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saltfleet</td>
<td>VIII</td>
<td>29</td>
<td>W.J. Stewart</td>
<td>Farm house</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30</td>
<td>Estate of John Stewart</td>
<td>Farm house</td>
</tr>
<tr>
<td></td>
<td></td>
<td>31</td>
<td>Jonathan Stewart</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
<td>33</td>
<td>Timothy Kennedy (south half)</td>
<td>Farm house; Orchard</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>John Fletcher (north half)</td>
<td>Farm house; Orchard; 2 Lime kilns</td>
</tr>
<tr>
<td></td>
<td></td>
<td>34</td>
<td>Essex Horning</td>
<td>2 Farm houses; Orchard</td>
</tr>
<tr>
<td>VII</td>
<td></td>
<td>33</td>
<td>Levi Pottruff (south half)</td>
<td>Farm house; Orchard</td>
</tr>
<tr>
<td></td>
<td></td>
<td>34</td>
<td>John Turner</td>
<td>---</td>
</tr>
<tr>
<td>Barton</td>
<td>VIII</td>
<td>1</td>
<td>D.D. Welst (south 1/3)</td>
<td>Farm house</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Susan Fletcher (mid-south 1/3)</td>
<td>Farm house</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S. James (north 1/3)</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>T. Parson (SW ¼)</td>
<td>2 Farm houses</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Jno. Fletcher (SE ¼)</td>
<td>Farm house</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>S. James (north half)</td>
<td>Farm house</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>James McBride</td>
<td>Church; Mill; 2 Farm houses; Orchard</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>James McBride</td>
<td>Farm house</td>
</tr>
<tr>
<td>Glanford I</td>
<td></td>
<td>13</td>
<td>J.H Horning (north half)</td>
<td>Blacksmith shop; 2 Farm houses; Orchard</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ira Horning (south half)</td>
<td>Farm house; Orchard</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
<td>J. Young (west of R.R.)</td>
<td>Blacksmith shop; 3 Farm houses</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Joseph Hannon (east of R.R.)</td>
<td>School house; 2 Farm houses; Orchard</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
<td>H. Glover (north half)</td>
<td>Farm house; Orchard</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H. Hannon (south half)</td>
<td>Farm house</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
<td>Jno. Biere (north half)</td>
<td>Church; Farm house</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>Jas Vanevery (south half)</td>
<td>Farm house; Orchard</td>
</tr>
<tr>
<td>II</td>
<td></td>
<td>13</td>
<td>E. Hannon (west of R.R.)</td>
<td>2 Farm houses; Orchard</td>
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<td></td>
<td></td>
<td>J.E. Otiphant (SE of R.R.)</td>
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<td>H. McHugh (NE of R.R.)</td>
<td>Farm house</td>
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<td></td>
<td>14</td>
<td>W. G. Walker</td>
<td>Farm house; Orchard</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>J. VanMere (SE corner)</td>
<td>Farm house</td>
</tr>
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<td>15</td>
<td>Joseph Hannon (NW ¼)</td>
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<td></td>
<td>H. Glover (NE ¼)</td>
<td>Mill</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>J. VanMere (SW ¼)</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H. &amp; J. P.</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H. Pierson</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M. Lowry</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M. Donahue</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
<td>J. Kelly (north half)</td>
<td>Farm house</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>J. Wilson (south half)</td>
<td>Farm house</td>
</tr>
<tr>
<td>III</td>
<td></td>
<td>13</td>
<td>R. Souls</td>
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<td>M. Donahue (north half)</td>
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<td></td>
<td></td>
<td>R. Cauldwell Heirs (south half)</td>
<td>Farm house</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
<td>W. Mitchell (north 1/3)</td>
<td>Farm house</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>R. Carr (south 2/3)</td>
<td>Farm house</td>
</tr>
<tr>
<td>Binbrook I</td>
<td>(Block 5)</td>
<td>5</td>
<td>Geo. Magill (north half)</td>
<td>Church; 2 Farm houses</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W.R. Freeman (south half)</td>
<td>Farm house</td>
</tr>
<tr>
<td>II (Block 5)</td>
<td></td>
<td>5</td>
<td>James Gage (north 1/3)</td>
<td>---</td>
</tr>
</tbody>
</table>
3.0 FIELD ASSESSMENT

A field review of the study areas was carried out by Mr. Peter Carruthers (P163), ASI, on September 14, 2006, in order to confirm the assessment of archaeological site potential and to determine the degree to which development and landscape alteration may have affected that potential. Weather conditions during the field assessment were warm and overcast.

The field assessment was conducted in three parts:

1) Trinity Church Road corridor extension (Figure 3; Plates 1-18);
2) Trinity Neighbourhood collector options (Figure 4; Plates 19-20); and
3) Dartnall Road extension options (Figure 5; Plates 31-48).

3.1 Trinity Church Road Corridor Extension

Several new routes options for Trinity Church Road have been proposed east and west of, and coinciding with the current Trinity Church Road right-of-way (Figure 3). The various options connect via a variety of collectors, many of which link to other proposed road extensions. In general, the area is comprised of agricultural lands with scattered historic farmsteads, isolated residential properties, and strips of residential properties. Most of the area is undisturbed by development.

Potential for historic sites can be expected along the historic transportation routes: Highland Road West, Pritchard Road, Rymal Road, Trinity Church Road, Twenty Road, and Dickenson Road. [Note, however, that the historic route of Rymal Road is not clear since the curve at the juncture of four townships does not appear on any historic mapping]. With the exception of the option that follows the existing Trinity Church Road, the other options intercept few known historic features and historic roads, and there is little potential for historic sites on those route options. Features of particular concern along Trinity Church Road include the church and associated cemetery (Plates 4 and 5) on the southwest corner at the Rymal Road intersection. Two registered historic sites, neither of which is considered to have archaeological significance (ASI 2006a), are situated within 100 metres of the extension options.

There is potential for pre-contact sites over most of the area covered by the route options. The numerous streams and springs would have attracted pre-contact peoples. In addition, the various other karst features may also have been of interest. The potential of the area is also evidenced by the presence of at least two registered pre-contact sites situated within 100 metres of the route options. One of the registered sites (AhGw-235) is a lithic scatter of indeterminate temporal and cultural affiliation that has been subject to Stage 2 and Stage 3 assessment as part of another study (ASI 2005b, 2006b). Another registered pre-contact site (AhGw-69) consists of two isolated non-diagnostic finds on the TCPL corridor; it was not considered to have archaeological significance (OASD; MHC, June 1988).

In general, the potential for archaeological sites is similar on the various connector options with one exception. The route that follows the existing Trinity Church Road has associated historical potential and therefore contains more possible impact to archaeological sites than the other options. It should be noted that much of the area between Highland Road and Rymal Road has been previously assessed (ASI 2005b, 2006b, 2006c) and, pending the results of those investigations, those lands may be cleared of further archaeological concerns.
3.2 Trinity Church Neighborhood

A series of collector options connect 2nd Road West (150 metres north of Rymal Road) to Highland Road West (between Winterberry Drive and City View Crescent) within the Trinity Church Neighborhood: the various options differ mainly in the point at which they meet Highland Road West (Figure 4). The routes extend across largely agricultural lands as well as fallow former fields and a small woodlot. Lands adjacent to Highland Road West include a mix of fallow former agricultural fields, as well as municipal, and residential properties.

There is potential for historic sites along the historic transportation routes of Rymal Road, Second Road West and Highland Road West. Although the historic mapping indicates only two historic farmsteads within the study area, previous archaeological assessment identified a number of historic sites. Two of the registered historic sites (AhGw-212 and -217) are within 100 metres of collector options, and both might require further assessment if impact is anticipated.

There is potential for pre-contact sites over most of the study area. This potential is evidenced by the presence of numerous streams and well drained soils, as well as by the pre-contact sites that have been registered in the study area. Three of the registered pre-contact sites (AhGw-211, -213, and -206) may be within 100 metres of collector options, but all are isolated finds and do not require further archaeological assessment (Timmins Martell 2006).

There is potential for archaeological sites over most of the study area, but some of the lands have been subject to a previous Stage 2 assessment of the Karst ANSI lands (Timmins Martelle 2006) and an assessment of a small property at the north end of Option #2 (ASI 2006a). Any lands that have been cleared by the MCL of further archaeological concerns will not require further archaeological assessment. Options #3 and #3a have less potential for archaeological sites since they are shorter and already partially disturbed.

3.3 Darnall Road Extension Options

Three options are proposed for the Darnall Road Extension, and all extend south from the existing intersection at Rymal Road and either connect to Twenty Road, to Nebo Road north of Dickenson Road, or to the Nebo Road-Dickenson Road intersection. The proposed roadwork includes improvements to existing Darnall Road south of Rymal Road as well as to Twenty Road, and reworking the Dickenson Road-Nemo Road intersection to accommodate Darnall Road. The three options differ only in the alignment of the centre section. The study area is largely comprised of agricultural fields and scattered farms and residences. A small industrial development lines the east side of Darnall Road on the south-east corner of the intersection with Rymal Road.

There is potential for historic sites where the proposed roadwork intersects or follows the historic transportation routes: Rymal Road, Twenty Road, Dickenson and Nebo Road. The historic atlas mapping indicates several historic farmsteads in the vicinities of the proposed routes.

There is also potential for pre-contact sites over most of the study area. This potential is evidenced by the presence of numerous streams and well drained soils, as well as by three registered pre-contact sites in the general study area. One of two sites within 100 metres of the route options is an isolated Late Archaic period find (AhGw-609). The other (AgHw-252) is a large lithic scatter that has probably been previously impacted by the TCPL pipeline, the road extension, industrial park development and the hydro transmission corridor.
4.0 SUMMARY AND CONCLUSIONS

The Stage 1 archaeological assessment of the Rymal Road Planning Area (ROPA 9 Lands) Master Plan Class Environmental Assessment Study, City of Hamilton, that includes a proposed Trinity Church Corridor Extension, a proposed collector road within the Trinity Neighbourhood and a proposed Dartnell Road Extension, revealed that 35 archaeological sites have been registered within the general limits of the two study areas for this project, but sixteen are within 100 metres of proposed options. Additionally, a review of the general physiography and local nineteenth century land use within the study areas suggested that these lands exhibit archaeological site potential.

**Trinity Church Corridor Extension.** Field review identified potential for archaeological sites over almost all of the study area. In view of the historic potential along the existing road, the option following existing Trinity Church Road is the least preferred alternative due to potential impact to heritage resources. In the area between Highland Road and Rymal Road, most of the area covered by the various route options has been previously subjected to archaeological assessment, and, pending clearance by the MCL, those lands would not require further assessment. Two of the five registered sites in the vicinity of the route options might require further archaeological assessment.

**Trinity Neighbourhood Collector.** Field review identified archaeological potential over most of the study area. Some of the area has been previously assessed, and the lands that have been cleared of further archaeological concerns would not require additional Stage 2 archaeological assessment. The preferred options would be the shortest: Options #3 and #3a. None of the five registered sites in the vicinity of these options would require further archaeological assessment.

**Dartnell Road Extension** Field review identified archaeological potential over most of the study area. Little of the area has been previously assessed, however, neither of the two registered sites in the vicinity of the options would require further archaeological assessment.

In view of these results, the following recommendations are made:

1) With the exception of lands that have been previously assessed and cleared of further heritage concerns by the MCL, a Stage 2 archaeological assessment should be conducted of each preferred route option within the Trinity Church Corridor Extension, Trinity Neighborhood Collector, and Dartnell Road Extension project areas, in accordance with the Ministry of Culture’s Stage 1-3 Archaeological Assessment Technical Guidelines (1993, 2006). This work would be conducted to identify any archaeological remains that may be present;

2) Prior to any land-disturbing activities adjacent to the Trinity Cemetery, investigations will be required to confirm the presence or absence of unmarked graves involving either the monitoring of the area by a licensed archaeologist during construction or the removal of the topsoil with a Gradall followed by the shovel shining of the exposed surfaces and inspection for grave shafts.

The above recommendations are subject to Ministry of Culture approval, and it is an offence to alter any archaeological site without Ministry of Culture concurrence. No grading or other activities that may result in the destruction or disturbance of an archaeological site are permitted until notice of Ministry of Culture approval has been received.

3) Should deeply buried archaeological remains be found during construction activities, the Heritage Operations Unit of the Ontario Ministry of Culture should be notified immediately.
4) In the event that human remains are encountered during construction, the proponent should immediately contact both the Ontario Ministry of Culture and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ontario Ministry of Government Services, (416) 326-8392.

The documentation related to the archaeological assessment of this project will be curated by Archaeological Services Inc. until such a time that arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of The City of Hamilton, the Ontario Ministry of Culture, and any other legitimate interest groups.

5.0 REFERENCES CITED

Andrea, C.

Archaeological Services Inc. (ASI)
2005a Stage 1 Archaeological Assessment ROPA 9 Master Plan Class Environmental Assessment, City of Stoney Creek, City of Hamilton, and Township of Glanbrook, Regional Municipality of Hamilton-Wentworth, Ontario. Report on file at the Ministry of Culture, Toronto.


2006b Stage 3 Archaeological Assessment of Site AhGw-235, 1809 Rymal Road East, Part of Lot 33, Concession 8, Geographic Township of Saltfleet, City of Hamilton. Report in preparation.

2006c Stage 3 Archaeological Assessment of Sites AhGw-193, 194, 195, 196, 197 and 198, Project Number D60938, Highland Road West and Upper Mount Albion Road, Part of Lots 33 and 34, Concession 8, City of Hamilton, Ontario. Report in preparation.

Buck, M.J., Worthington, S.R.H. and D.C. Ford
2003 Evaluation of the Eramosa Karst in Stoney Creek, Ontario, as a Candidate Earth Science ANSI. Prepared for the Ontairo Ministry of Natural Resources.

Chapman, L.J. and D.F. Putnam

Ministry of Culture
Ministry of Culture  
1997 *Conserving a Future for our Past: Archaeology, Land Use Planning & Development in Ontario.* Archaeology & Heritage Planning Unit, Cultural Programs Branch, Ontario Ministry of Culture, Toronto.


Ministry of Natural Resources  

Page and Smith Co.  

Timmins Martelle Heritage Consultants Inc.  
Figure 4: Rymal Road Planning Area Municipal EA Master Plan, Trinity Neighborhood Collector Alignments - Results of Stage 1 Archaeological Assessment.
Figure 5: Rymal Road Planning Area Municipal EA Master Plan, Dartnall Road Extension - Results of Stage 1 Archaeological Assessment.
### 6.0 PHOTOGRAPHY

#### 6.1 Trinity Church Road Options

<table>
<thead>
<tr>
<th>Plate 1:</th>
<th>View to south toward Rymal Road from Stone Church Road. Gentle slope toward stream.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate 2:</td>
<td>View to south from Rymal Road, across fields sloping toward stream.</td>
</tr>
<tr>
<td>Plate 3:</td>
<td>View to north, fields beyond residential properties along Rymal Road.</td>
</tr>
<tr>
<td>Plate 4:</td>
<td>View to southwest toward Trinity Church (1874). Note cemetery to north of church on southeast corner of intersection.</td>
</tr>
<tr>
<td>Plate 5:</td>
<td>View to north within cemetery south of Trinity Church. Narrow ROW and chain link fence.</td>
</tr>
<tr>
<td>Plate 6:</td>
<td>View to northeast, historic house on east side of Trinity Church Road near cemetery.</td>
</tr>
</tbody>
</table>
Plate 7: View to northeast, fields on northeast corner of intersection of Rymal Rd and Pritchard Rd.

Plate 8: View to south, residential disturbance on south side of Rymal Road.

Plate 9: View to northeast, hydroelectric corridor may be disturbed.

Plate 10: View to northeast toward stream from intersection of hydro corridor and Trinity Church Road.

Plate 11: View to south, fields slope toward stream.

Plate 12: View to southwest, agricultural fields with stream and several sinkholes in vicinity of road.
Plate 13: View to northwest, agricultural fields. Sinkhole at vegetation mound at right.

Plate 14: View to west, agricultural fields crossed by intermittent streams.

Plate 15: View to north along Trinity Church Road from Dickinson Road intersection.

Plate 16: View to east, residential properties in distance are on east side of Trinity Church Rd.

Plate 17: View to northeast across agricultural fields toward historic farm accessed from Trinity Church Rd.

Plate 18: View to east, along ROW for Twenty Road extension.
6.2 Trinity Neighborhood Collector Alignments

Plate 19: View to north from intersection of Rymal R and 2nd Road West. Note residential development.

Plate 20: View to northwest from intersection of 2nd Road West and Gatesone Dr. From east end of option.

Plate 21: View to northwest, option extends across agricultural field.

Plate 22: View to west along field boundary. Looking into ASNI feeder, buffer and core areas, toward houses on Upper Albion Road.

Plate 23: View to south-southwest toward small woodlot that drains into Karst ANSI.

Plate 24: View to northwest across fallow field. Hedge-row at right is behind residential properties.
Plate 25: View to south from Highland Road West, north end of Option 3 on east side of pumping station at City View Crescent. No potential due to disturbance.

Plate 26: View to south from Highland Road West, north end of connector Option 3a on west side of pumping station. No potential due to disturbance.

Plate 27: View to south from Highland Road West, north end of connector Options 1 and 1A at Glenhollow Drive. Possible potential for sites.

Plate 28: View to south from Highland Road West, north end of connector Option 4 just west of Glenhollow Dr. Possible potential for sites.

Plate 29: View to south from Highland Rd. West, north end of connector Option 2. Possible potential for archaeological sites.

Plate 30: View to south at Highland Rd. West, north end of connector Option 5 opposite Winterberry Drive. Possible potential for sites.
6.3 Dartnall Road Extension

Plate 31: View to south from intersection. Note historic farm on SW & fields on SE corner. Some commercial disturbance on west side of Dartnall Rd.

Plate 32: View to south-southeast from south end of existing Dartnall Road. Fields extend south to dump mounds in right background.

Plate 33: View to south along proposed extension. Options diverge at far end of fencerow.

Plate 34: View to east along Twenty Road. Dips in road are at stream crossings.

Plate 35: View to north along Option #1, streams and fields with site potential.

Plate 36: View to south along Option #1, disturbance near Twenty Road.
Plate 37: View to south between Options #2 and #3, fields. Trees along streams.

Plate 38: View to north between Options #2 and #3, trees along stream course.

Plate 39: View to west, fields on either side of Twenty Road. School on SW corner of Nebo intersection.

Plate 40: View to north, modern and historic (1875) schools on NE corner of intersection of Twenty and Nebo Roads.

Plate 41: View to west, historic potential near Nebo Road and Twenty Road intersection. Former rail crossing just west of intersection.

Plate 42: View to west toward option routes across fields and stream.
Plate 43: View to south-southeast along route of connector between Nebo Road and Dartnall Rd. Note fields and disturbed industrial area beyond.

Plate 44: View to south along Nebo Road where cul de sac is proposed.

Plate 45: View to west of nineteenth century residence and farm that would be impacted by south end of extension.

Plate 46: View to south of intersection of Dickenson and Nebo at south end of options. All corners are fields with historic potential.

Plate 47: View to north-northeast along south end of connection at junction with existing intersection of Nebo Road and Dickenson Road.

Plate 48: View to east, intersection of Nebo Road and Dickenson Road. Agricultural fields on northeast corner and transmission station on southeast corner.
7.0 OVERSIZED GRAPHICS

**Figure 3:** Rymal Road Planning Area Municipal EA Master Plan, Trinity Church Road Corridor Extension (north and south of Rymal Road) – Results of Stage 1 Archaeological Assessment.

**Figure 4:** Rymal Road Planning Area Municipal EA Master Plan, Trinity Neighborhood Collector Alignments – Results of Stage 1 Archaeological Assessment.

**Figure 5:** Rymal Road Planning Area Municipal EA Master Plan, Dartnall Road Extension – Results of Stage 1 Archaeological Assessment.
## Trinity Church Corridor
### From Rymal Road to Stone Church Road

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
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<th>Quantity</th>
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<th>Total Price</th>
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**Sub-Total Construction Cost**: $3,891,500

Streetlighting (10% of Construction Cost)   $389,150.00

Minor Items (5% of Construction Cost)       $194,575.00

Landscaping (10% of Construction Cost)      $389,150.00

Estimated Contingencies (20%)               $778,300.00

Estimated Engineering - Civil, Geo, etc. (10%) $389,150.00

**Total Construction Cost**: $6,031,825.00

**GST Calculation (6%)**: $361,909.50

**Total Estimated Project Cost**: $6,394,000

11/06/2007 10:58 AM

iTRANS
### Trinity Church Corridor
From Proposed North Glanbrook Collector Road to Rymal Road

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Unit</th>
<th>Estimated Quantity</th>
<th>Unit Price</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Excavation</td>
<td>m$^3$</td>
<td>15400</td>
<td>$10.00</td>
<td>$154,000</td>
</tr>
<tr>
<td>2</td>
<td>Clearing and Grubbing</td>
<td>LS</td>
<td>1</td>
<td>$15,000.00</td>
<td>$15,000</td>
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<tr>
<td>3</td>
<td>Remove concrete curb and gutter all types including sawcutting</td>
<td>m</td>
<td>0</td>
<td>$8.00</td>
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<tr>
<td>4</td>
<td>Remove concrete sidewalks, all thicknesses</td>
<td>m$^2$</td>
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<tr>
<td>5</td>
<td>Remove islands, etc. (Including curb)</td>
<td>m$^2$</td>
<td>0</td>
<td>$13.00</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>Adjust manholes</td>
<td>each</td>
<td>0</td>
<td>$1,000.00</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>Relocate catchbasin including Leads</td>
<td>each</td>
<td>0</td>
<td>$2,000.00</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Relocate light standard/Telephone Poles</td>
<td>each</td>
<td>0</td>
<td>$3,000.00</td>
<td>-</td>
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<tr>
<td>9</td>
<td>Relocate traffic signals</td>
<td>each</td>
<td>0</td>
<td>$80,000.00</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>Relocate hydro poles</td>
<td>each</td>
<td>0</td>
<td>$85,000.00</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>Relocate hydro poles (Minor)</td>
<td>each</td>
<td>0</td>
<td>$15,000.00</td>
<td>-</td>
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<tr>
<td>12</td>
<td>Relocate fire hydrants</td>
<td>each</td>
<td>0</td>
<td>$900.00</td>
<td>-</td>
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<tr>
<td>13</td>
<td>Relocate bus shelter pads</td>
<td>each</td>
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</tr>
<tr>
<td>14</td>
<td>Relocate bus shelter</td>
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<td>$2,000.00</td>
<td>-</td>
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<tr>
<td>15</td>
<td>Supply and place HL8(HS) 120mm thick</td>
<td>t</td>
<td>1000</td>
<td>$75.00</td>
<td>$75,000</td>
</tr>
<tr>
<td>16</td>
<td>Supply and place HL3(40mm Thick)</td>
<td>t</td>
<td>2600</td>
<td>$80.00</td>
<td>$208,000</td>
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<tr>
<td>17</td>
<td>Supply and place Granular A (150 mm depth)</td>
<td>t</td>
<td>4700</td>
<td>$25.00</td>
<td>$117,500</td>
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<tr>
<td>18</td>
<td>Supply and Place Granular B (450mm depth)</td>
<td>t</td>
<td>15500</td>
<td>$20.00</td>
<td>$310,000</td>
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<tr>
<td>19</td>
<td>Construct concrete curb / curb and gutter</td>
<td>m</td>
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<tr>
<td>20</td>
<td>Conc. Sidewalk</td>
<td>m$^2$</td>
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<td>$75.00</td>
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<tr>
<td>21</td>
<td>Construct Retaining Wall</td>
<td>m$^2$</td>
<td>0</td>
<td>$800.00</td>
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</tr>
<tr>
<td>22</td>
<td>SS-1 Emulsified Tack Coat</td>
<td>m$^2$</td>
<td>0</td>
<td>$1.00</td>
<td>-</td>
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<tr>
<td>23</td>
<td>Supply and install 150 mm dia. Subdrains including liner, backfill, and connections</td>
<td>m</td>
<td>0</td>
<td>$25.00</td>
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<tr>
<td>24</td>
<td>1.0m kill strip where applicable</td>
<td>m</td>
<td>0</td>
<td>$25.00</td>
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</tr>
<tr>
<td>25</td>
<td>Break into existing catchbasin, maintenance hole</td>
<td>each</td>
<td>0</td>
<td>$600.00</td>
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</tr>
<tr>
<td>26</td>
<td>Break into Existing Storm Sewer</td>
<td>each</td>
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<td>$300.00</td>
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<tr>
<td>27</td>
<td>CSP Driveway Culverts</td>
<td>m</td>
<td>0</td>
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<td>-</td>
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<tr>
<td>28</td>
<td>Topsoil &amp; sodding (included in landscaping)</td>
<td>m$^2$</td>
<td>0</td>
<td>$10.00</td>
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</tr>
<tr>
<td>29</td>
<td>Reinforced Concrete Bus Bay (assume 1)</td>
<td>m$^2$</td>
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<td>$45.00</td>
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<tr>
<td>30</td>
<td>Extend Flexible Pipe Culverts</td>
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<tr>
<td>31</td>
<td>Noise Wall</td>
<td>m</td>
<td>0</td>
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<td>$0</td>
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<tr>
<td>32</td>
<td>Water for Dust Suppression</td>
<td>L.S.</td>
<td>1</td>
<td>$15,000.00</td>
<td>$15,000</td>
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<tr>
<td>33</td>
<td>Supply Calcium Chloride Flakes</td>
<td>kg</td>
<td>0</td>
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<tr>
<td>34</td>
<td>Supply Single Rail Steel Beam Guide Rail with Channel</td>
<td>m</td>
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<td>$80.00</td>
<td>$0</td>
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<tr>
<td>35</td>
<td>Pavement Marking, including Symbols</td>
<td>L.S.</td>
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<td>$15,000.00</td>
<td>$15,000</td>
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<tr>
<td>36</td>
<td>Staging and Traffic Management during Construction</td>
<td>L.S.</td>
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</tr>
<tr>
<td>37</td>
<td>Barrier for Tree Protection</td>
<td>m</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>39</td>
<td>New Roundabout</td>
<td>each</td>
<td>1</td>
<td>$350,000.00</td>
<td>$350,000</td>
</tr>
<tr>
<td>40</td>
<td>New Traffic Signals (includes ramp int.)</td>
<td>each</td>
<td>0</td>
<td>$150,000.00</td>
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<tr>
<td>41</td>
<td>Storm Sewer (incl. MH and CB)</td>
<td>m</td>
<td>0</td>
<td>$500.00</td>
<td>-</td>
</tr>
<tr>
<td>42</td>
<td>Remove, Salvage and relocate sign</td>
<td>L.S.</td>
<td>0</td>
<td>$5,000.00</td>
<td>-</td>
</tr>
</tbody>
</table>

Sub-Total Construction Cost: $1,259,500

- Drainage (10% of Construction Cost): $125,950.00
- Streetlighting (10% of Construction Cost): $125,950.00
- Minor Items (5% of Construction Cost): $62,975.00
- Landscaping (10% of Construction Cost): $125,950.00
- Estimated Contingencies (20%): $251,900.00
- Estimated Engineering - Civil, Geo, etc. (10%): $125,950.00

Total Construction Cost: $2,078,175.00

GST Calculation (6%): $124,690.50

Total Estimated Project Cost: $2,203,000

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